

Printed for Tho: Dring in Fleetstreet. 1682.



John Worlidge.

Syſtema Horti-culturæ:

OR, THE

ART

OF

GARDENING.

In Three Books.

The I. Treateth of the Excellency, Scituation, Soil, Form, Walks, Arbours, Springs, Fountains, Water-works, Grotto's, Statues, and other Magnificent Ornaments of Gar[illegible]ns, with many neceſſary Rules, Precepts, and Di[illegible]ctions, concerning the ſame.

The II. Treateth of all ſorts of Trees planted for Ornament of Shade, Winter Greens, Flower Trees, and Flowers, that are uſually propagated or preſerv'd in the Gardens of the beſt Floriſts, and the beſt ways and methods of Raiſing, Planting, and Improving them.

The III. Treateth of the Kitchin Garden, and of the great variety of Plants propagated for food or for any culinary uſes: Together with many general and particular Rules, Precepts, Obſervations, and Inſtructions, for the making hot beds, altering and enriching any ſort of Garden ground, watering, cleanſing, and adapting all ſorts of Earth to the various Plants that are uſually planted therein. To the great improvement of every ſort of Land, as well for uſe and profit as for Ornament and delight.

ILLUSTRATED with SCULPTURES, repreſenting the form of GARDENS, according to the neweſt MODELS.

The Second Edition with large Additions.

By *J. W.* Gent.

LONDON,

Printed for *Tho. Dring* at the *Harrow* over againſt the *Inner-Temple* Gate in *Fleetſtreet*. 1683.

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THE PREFACE TO THE READER.

ARts as well as *Habits*, are ſubject to that fate of being in mode, as might be inſtanced in ſeveral, beſides this curious Art of *Horti-culture* : which never declines when once it is becomeNational,only varies in Form, according to the ſeveral temporary humours of ſuch that place their oblectations in it. As for that part of Gardening, which is for the propagation of Trees for pleaſure, and beautifying Seats with invegetate Ornaments, ſcarce any part of the

World, but eſtimates it at a more than ordinary value. As for that part which is for *Flora*'s uſe, the extream hot or cold parts are little addicted to it, thoſe in the temperate Zone the moſt: For theſe luſtrous beauties affect not *Sol*'s ſcorching rays, nor can their tender lovely faces endure *Hyems*'s too great ſeverity, yet of the two extreams, the cold is the moſt tolerable, there being naturally more Flowers in the Meadows of the *Ruſſian* Territories, than in thoſe of *Guinea*. But as for that part that relates to *Eſculent* Plants, all Nations delight in it for the raiſing of ſuch that are moſt proper for their Climate. Nature it ſelf hath directed us where and in what parts *Gardens* are to be planted with advantage, having ſpontaneouſly expoſed to our view many curious

Plants,

Plants, which made *Varro* to ſay, *Divina natura dedit agros*; which is in effect, that divine Nature hath indicated unto us thoſe grounds that are fit for theſe uſes: There reſts only our care and induſtry to till and manure them, which was an exerciſe appropriated unto us from the beginning. That our Engliſh ſoyl then is generally fit for all theſe uſes, may appear from its aptneſs to produce naturally ſo great variety of Trees for beauty and ſhade, Flowers for delight, and edible Plants alſo if they are ſown in it, which is a ſufficient encouragement for the *Ingenious* farther to proſecute this Art, which is of late years much improved in every part thereof. It was not long ſince that our choiceſt Avenues were firſt planted with thoſe Ornamental ſhades that now are become common, and that

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our beſt Gardens were only worthy of thoſe natural Beauties that now flouriſh in every ordinary *Partir*; many of our now vulgar diſhes of *Tillage* alſo were but lately eſteem'd as Rarities. And as this *Art* hath with its Subjects encreaſed of late years, ſo have the Inſtructions or Treatiſes written to that effect been multiplied: The affections of our Countrymen ſo naturally tending that way, have given great encouragement to ſuch Publications, ſome whereof are very large and voluminous, others there are that are more accurt, and treat only of ſome particular Plants, and ways of ordering them. And as the Art it ſelf was at firſt lame, ſo have the Directions for its Improvement been; that if an inquiſitive perſon deſires to be informed of the different ways, methods, or means to order his Garden, *&c.* he muſt

procure

procure many ſeveral Tracts, and thoſe differing very much in their Rules and Preſcriptions the one from the other, and delivering many fabulous Stories, and directing you in erroneous ways, affirming them to be true that are meerly ſuppoſititious; ſome of them are only tranſlated out of other Languages, which were written for other Countries, whoſe *Horti-culture* (as their Climate) varies very much from ours. All which Inconveniences I have here endeavoured to avoid, by contracting into a ſmall pocket volume, the names of the moſt and principal kinds of Ornamental *Trees* and *Flowers*, with their proper ways and methods of ordering, and an account of all ſuch *Eſculent* Plants that are here uſually propagated for culinary uſes: Together with the method and manner of ſelecting

grounds

grounds for Gardens, and the making, forming, and adorning them, and the improving, preſerving, altering or renewing the ſeveral ſorts of Earths for all hortulane Plants, wherein as near as may be I have not troubled you with unneceſſary, inſignificant, uſeleſs, nor falſe Directions, but have inſerted only ſuch that either I have actually experimented to be true, or have them from perſons or Authors of good repute; or that are deduced from ſolid principles. Alſo I have not ſwell'd this ſmall Tract, nor troubled your patience, with the many unneceſſary names nor characters of the various ſpecies of Flowers, and ſeveral other Plants, but nominated the more principal, the other being rather to be ſelected when in their prime by your Eye, than confided in from lame deſcriptions. It is better

ter to truſt to the integrity of a Gardener, than ſuch Directions that are uſually written, and ſeem to emblazon the fame of a poor ſimple Flower, which when you ſee its higheſt luſtre in the beſt part of your Garden, (as by the deſcription and the price you gave for it, it ſhould deſerve) you are ready to remove it to the moſt abject place of your Groves. It may be objected, that there are many things in this Treatiſe that have been formerly written of, and therefore it ſeems to be ſuperfluous. It is true, very able Pens have written of this Subject, but they themſelves could not write without mentioning ſome things, and thoſe not few, that had been publiſhed before: It being very rare to find a Treatiſe in this Age, wholly of a new Subject; and any would eſteem it a grand deficiency in the improvement of

this Art, if none ſhould have written of it ſince Mr. *Parkinſon*, Sir *Hugh Plat*, *Meager*, and ſeveral others, becauſe theſe had written before on the ſame Subject. I hope therefore that this objection will have no place againſt this Tract, the rather becauſe it hath the Characters (that Mr. *Auſtin* hath propoſed in his Epiſtle Dedicatory, before his *Treatiſe of Fruit-Trees*) that Books of this nature ſhould have, *viz.* 1. *That they be of ſmall bulk and price*, wherein I hope I have conformed, conſidering the variety of Matter herein diſcourſed of. 2. *That the ſtyle be plain, and ſuited to the Vulgar*: In this I am ſure I have not tranſgreſſed; for I have wav'd as near as I could, all hard words and intricate expreſſions (now in mode) not in any wiſe ſuitable to this plain, honeſt and ruſtick Employment. 3. *That theſe*

Books

Books for Inſtruction, be experimental: As to this propoſal I have exactly obſerved it. You will alſo find ſeveral Matters here treated of, that have not as yet been mentioned in any Hortulane Tracts, and many Experiments very uſeful and beneficial, that were never made publick before: My principal deſign being not only to excite or animate ſuch, that have fair Eſtates and pleaſant Seats in the Country, to adorn and beautifie them, but to encourage the honeſt and plain Countryman in the improvement of his Ville, by enlarging the bounds and limits of his Gardens as well as his Orchards, for the encreaſe of ſuch Eſculent Plants that may be uſeful and beneficial to himſelf and his Neighbours. Many there are in this Kingdom, that out of ſmall portions of Land, have by their induſtry and ingenuity in this

very way of Improvement, maintained themſelves and their Families, and acquired over and above wherewith to enlarge their Poſſeſſions. Several parts beyond the Seas, in *Holland*, *Flanders*, *France*, *Switzerland*, (of a near temperature of Air with us) can ſhew multitudes of Examples of this nature; *Italy* alſo in *Pliny*'s time, now the Garden of the world, was then improvable by this way of Tillage: As appears by that Hiſtory of *C. Furius Creſinus*, who out of a ſmall piece of ground raiſed more advantage, than his Neighbours out of their greater Poſſeſſions, but then not without the Imputation of Sorcery, ſuch was the ignorance and envy of that Age.

In this Country in many places, ignorance, ſloth, and envy, are great impediments to this way of Improvement, no Country in the World

World being without ſome perſons fraught with lazy and enviòus humors. Therefore we cannot be exempt from them, the beſt of Airs naturally nonriſhing the worſt of Animals, and the beſt of Gardens naturally producing the worſt of Weeds.

As for ſlothful men, they are the greateſt burthen to themſelves, but envious men, although they are ſo great an affliction to themſelves, (as *Horace* obſerved, that the *Sicilian* Tyrants never invented the like torment) yet are they alſo the worſt Neighbours to good Husbandry, not only to the conſtant depraving the endeavours and ingenuity of the induſtrious, but uſing all means they can to impede or prevent their proſperity: Like unto him that poyſoned the Flowers in his own Garden, becauſe his Neighbours Bees ſhould get no more honey from them. A-

gainſt ſuch as theſe every ingenious and induſtrious man ought to be well provided, with a competent proportion of patience and diſcretion, and not to be diſcouraged from proſecuting his intentions of improving his Ville, either by this way here propoſed, or by ſome of the ways formerly treated of for the planting of Fruits, or ſome other ways of Husbandry more advantagious than the old beaten way, ſo much by ſome contended for, there being no Land, eſpecially the ſmaller Farms, but is capable of improvement by ſome of thoſe methods propoſed: Although I know that there are many that contend for the ancient way of Husbandry, and living upon our own Growths and Manufactures, as of old we have done, ſlighting and contemning the Improvements that are daily made in

Vide Vinetum Britannicum.

Syſtema Agriculturæ.

in all manner of Husbandry and *Horti-culture*, and in all Mechanick Arts and Manufactures, ſeeming to emulate the felicity of former Ages, not conſidering the great mutations that are made in the World, as well in the various occupations and exerciſes of men, as in things of higher natures. Many new Arts are diſcovered, and new ways of Trade, not only to encreaſe Manufactures, but to facilitate the great labour and expence men are put unto in the vulgar method of uſing them, of which very little hath hitherto been written, and of which (as time and opportunity ſhall favour me) I intend to diſcourſe particularly, (having made a thorow ſcrutiny into many Trades, Arts, and Occupations, to diſcover the great imperfections and defects of them.) Which may be of great uſe to the advancement of

Trade, and to the converting the labour and induſtry of the People of this Nation, and their beaſts of labour to the greateſt advantage, there being nothing more wanting in this Nation than hands to work up, and people to manage the great plenty of Materials *England* affords. Not that I will propoſe Conjectures and Probabilities for real Experiments and Inventions, gain Priviledges for their ſole uſe, and leave others at their own coſt and pains, to diſcover the Truths and Errors of them, and if they prove advantagious, to engroſs the profit to my ſelf, as ſeveral have lately done: But faithfully to convince the Impartial of former defects, and moſt apt ways to improve ſuch mechanick Arts and Deſigns, that there may be as well an Improvement of the Manufactures and mechanick Arts, that

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are operated out of our own growths and productions, as well as an encreaſe of ſuch growths and productions themſelves, all conducing to the honour, reputation, ſtrength, and advantage of this Nation. Many have ſet to their helping hands to ſeveral parts of that deſign, but rather by way of Propoſals or Encouragements (which have not been altogether vain and uſeleſs) others by irregular and unſucceſsful Attempts, by which means ſome light hath been given to other things that have not proved unuſeful: As it is obſerved that thoſe that attempt the Philoſophers Stone, failing of their end, yet they diſcover many rare things of uſe and delight; and as hath been moſt evident, that the many Attempts that within theſe forty years have been made to keep Bees, (thoſe profitable Inſects) in wooden Caſes,

Caſes, and thereby annually to take their honey, and yet preſerve their lives: Although the Invention or rather conceit hath not yet ſucceeded, yet hath the hopes of gain prompted many to ſtock themſelves with Bees, which deſign is now more likely than ever to be effected; many ingenious men having undertaken at their great coſt and pains theſe two laſt years, and are yet upon their Experiments, to ſee the end of it, very much to the reputation and advantage of him that gives them leave ſo to do.

There are ſeveral Objections may be raiſed againſt Improvement of Lands by Garden-Tillage: Some of them I ſhall take notice of in the enſuing Tract; the other are ſo ſlight, that they are not worthy the mentioning, all ſeeming to proceed from the ſame principles, as thoſe have

that

that would not that their Neighbours ſhould breed Cattel at an eaſie rate, to hinder them from ſelling their own at a dear rate, and that would not have the Farmers that live on the dry lands, ſow any *Clover*, St. *Foyn*, or ſuch like, becauſe the productions of their lower and richer lands ſhould yield them the greater price, endeavouring to reduce all places to their old natural way of husbandry, all lands to yield no other commodity, than what it will ſpontaneouſly produce, deſpiſing Art and Induſtry, deeming them as Innovations. Nevertheleſs I hope I may excuſe theſe perſons, being our own Countrymen, from ſuch ſtupid ignorance, and impute it to their Intereſt, which thus biaſſeth their judgments, & puts them ſomtimes to the charge of a conteſt, which their ignorance only would never provoke them to.

J. W.

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THE

Syſtema Horti culturæ;

OR,

The Art of GARDENING.

LIB. I.

Of Gardens of Pleaſure, and the Solid Ornaments thereof.

THE Excellency of a *Garden* is better manifeſted by Experience, which is the beſt Miſtreſs, than indicated by an imperfect Pen, which can never ſufficiently convince the Reader of thoſe tranſcendent pleaſures, that the Owner of a Compleat *Garden* with its Magnificent *Ornaments*, its Stately *Groves*, and infinite variety of never

dying *Objects of Delight* every day enjoys: Nor how all his Senſes are ſatiated with the great variety of Objects it yields to every of them: Nor what an influence they have upon the paſſions of the mind, reducing a diſcompoſed fancy to a more ſedate temper by contemplating on thoſe miracles of Nature *Gardens* afford; deemed Miracles, becauſe their admired and ſtrange forms and effects proceed from occult cauſes.

The Original of *Gardens* was from a Divine Hand: And they alſo long ſince delighted in by the wiſeſt of Kings, and in principal eſteem ever ſince by the beſt of men: The Heathen dedicated them to *Priapus* the Son of *Venus*, and celebrated them as Objects of admiration and delight, and left their immortal names to poſterity; as the *Gardens* of the *Heſperides*, *Adonis*, *Alcinous*, *&c.* The memory of the Latter being yet freſh in the Iſle of *Corfu*, where in a moſt delicious ſcituation it formerly was ſuppoſed to be, as a late Traveller * hath affirmed.

* *M.* Francis Vernon's *Letters to the Royal Society*, *N.* 124.

Tarquin the Proud (a Roman King) thought no place more worthy than his Garden to give Audience to an Ambaſſador ſent unto him: And the Glory and Pride

Pride of the *Romans* in the time of their *Emperours*, was in nothing more ſeen than in their *Gardens*, which for the infinite delight they took in them, they dedicated to *Venus* their Goddeſs of pleaſure, and gloried more in their Chaplets and Garlands of Curious Greens and Flowers, than our vain Contemporaries now do in their richeſt party-coloured habits, which he that reads what *Pliny* obſerved of them, will readily believe.

The *Italians*, in the time of their Ancient Glory, thought no Palace nor Habitation compleat without its Garden, on which they ſpared for no coſt, as well in their forming them, as for the naturalizing ſeveral exotick Plants they brought from *Africa* and other Foreign places. Which Gardens they have from Age to Age ſo improved, that it is now become it ſelf the Garden of the World. And as Architecture, that ſplendid Art, hath ſpread it ſelf with other Sciences into theſe Northern Climates, ſo hath the Art of Gardening been handled along with it, as though the former were imperfect without the latter: The Glory of the French Palaces, ſo often repreſented to our Engliſh Eyes in ſculpture, are adorn'd with their beauteous Gardens

before them, which wanting, they would ſeem without Luſtre or Grandeur.

Neither is there a Noble or pleaſant Seat in *England* but hath its Gardens for pleaſure and delight; ſcarce an Ingenious Citizen that by his confinement to a Shop, being denied the priviledge of having a real Garden, but hath his boxes, pots, or other receptacles for Flowers, Plants, *&c.* In imitation of it, what curious Repreſentations of Banquets of Fruits, Flower-pots, Gardens, and ſuch like, are painted to the life, to pleaſe the Eyes, and ſatisfie the fancy of ſuch that either cannot obtain the Felicity of enjoying them in reality, or to ſupply the defect the Winter annually brings?

So that we may without vanity conclude that a Garden of pleaſant Avenues, Walks, Fruits, Flowers, Grots, and other branches ſpringing from it, well compoſed, is the only compleat and permanent inanimate object of delight the world affords, ever complying with our various and mutable Minds, feeding us and ſupplying our fancies with daily Novels.

All curious pieces of Architecture, Limning, Painting, or whatever elſe that ſeem pleaſant to the eye or other ſenſes at firſt

ſight

ſight or apprehenſion, at length become dull by too long acquaintance with them. But the pleaſures of a Garden are every day renewed with the approaching *Aurora*.

While with ſucceeding Flow'rs the year is crown'd
Whoſe painted Leaves enamel all the ground;
Admire not them, but with more grateful Eyes
To Heaven look, and their great Maker prize.
In a calm night the Earth and Heaven agree,
There radiant Stars, here brighter Flow'rs we ſee.
Gardens, as if immortal ne'r decay,
And fading Flow'rs to freſher ſtill give way. Rapinus.

Such is its pre-excellency that there is ſcarce a Cottage in moſt of the Southern Parts of *England* but hath its proportionable Garden, ſo great a delight do moſt of men take in it; that they may not only pleaſe themſelves with the view of the Flowers, Herbs and Trees, as they grow, but furniſh themſelves and their Neighbours upon extraordinary occaſions, as Nuptials, Feaſts, and Funerals, with the proper products of their Gardens.

Flowers in many things convenient are,
Our Tables, and our Cupboards we prepare
With them; and better to diffuſe their ſcent,
We place them in our Rooms for Ornament.
By others into Garlands they are wrought;
And ſo for off'rings to the Altars brought.
Sometimes to Princes Banquets they aſcend,
Rapinus. *And to their Tables Fragrant Odours lend;*

It furniſhes our Kitchin and Tables with various Eſculents, as well ſatisfying nature as pleaſing our Appetites, it yields us various Spirits, Eſſences, Perfumes, Waters, Unguents, Conſerves, Preſerves, and many other neceſſary, uſeful, and pleaſant Dietical and Medicinal Curioſities, which the ſame *Rapinus* hath elegantly expreſſed in his Poems on the ſame Subject, and at laſt concludes,

I ſhould too tedious be, if I ſhould ſing
The mighty Aids which Herbs and Flowers bring
To the diſeaſes men are ſubject to:
For theſe the Gods with Vertue did endue.

CHAP.

CHAP. I.

Of the Scituation and Soyls of a Garden, and their Improvement.

SECT. I.

Of the Scituation of a Garden.

IT may ſeem needleſs to ſay any thing of the Scituation of a Garden, it being ſo abſolute a Concomitant to your Habitation, that a Garden remote or by its ſelf is neither pleaſant nor uſeful. Therefore where-ever your Houſe is, near it muſt be your Garden.

But in caſe you have not yet laid the foundation of your intended reſidence, then may you conſider what Ground or Soyl is beſt for your Plantation and Partirre, without which you can never make the other compleat.

Therefore as near as you can, let the Soyl be good, deep and light, that Trees and Tillage may proſper in it, and then you need not queſtion but Flowers will

thrive there: Let it have the free and open Air to the Eaſt and South, but the South-Eaſt is to be preferred, and the North defended by tall Trees, which are better than Hills, which give too great a reflexion of Heat in the Summer, and impede the cool Breezes that frequently come out from that Coaſt. If the whole Garden be at ſome diſtance defended by tall Trees, it will very much break the fierce Winds and ſerene Airs that in the Winter and Spring uſually annoy the moſt delicate Plants and Flowers, and will alſo yield a cooling, refreſhing, ſweet and healthy Air and Shade in the hotteſt Seaſons.

If the Soyl be dry and warm, a plain Level is beſt for a Garden, but if it be cold or moiſt, then declining or ſhelving towards the Sun is the beſt poſition, becauſe by Foſſes or by the Walks only the water naturally glides from it. And in ſuch a Garden, Trees, Plants and Flowers, will thrive exceedingly.

Theſe Rules are good where you are to make your election, what ſort of ground, and where you deſign your ſeat: I might have alſo added, the ſprings of water in or near your Garden, are great additions to the Improvement, Beauty and Glory of it, but

but that it's hoped few will ſeat themſelves where that Element is wanting, unleſs it be for the ſake of ſome pleaſant Grove, Proſpect, or delicate Air, Woods and Water, being two of the beſt Ornaments of the Seat, which may be had in moſt places, together with a good Air, but ſeldom Water and a good Proſpect.

If you are fixed or limited to a place or ſcituation, that puts an end to Election, and then you are to conſider the nature of the Soyl you are on, what it is apt to produce, how to be corrected and improved.

SECT. II.

Of the different, and moſt natural Soyls for Gardens.

LAnds are uſually inclinable to Loam, Clay, Chalk, Marle, or Sand.

A Loamy Land is uſually free, and apt to vegetation, warm and eaſie to till, the ſadder the colour the better; if it be free from ſtones and gravel, with a ſandy mixture and mellow withal, it is eſteemed the beſt for Gardens, for the moſt ſorts of Fruits and Flowers.

There

There is much Land that is mixed with Clay in too great a proportion, which maketh it apt to bind, and is cold and moiſt in the Winter ſeaſon retaining wet too much, and apt to chap in the Summer, it is injurious to moſt Fruits and Flowers, and therefore hath moſt need of help of any other.

Chalky Land is generally very ſweet, and kind to many Plants that are not very tender, it being cold in the Winter, and ſuffers not its Plants to put forth early in the Spring, it is not difficult to be corrected, and made more natural to the choiceſt Fruits and Flowers.

Marle is a very good mixture in Land, ſo that it be not in too great a quantity, it being much of the nature of Chalk, but eaſier to be tilled and improved.

Sandy Land is very warm and free, very apt for vegetation, and amicable to moſt of our choiceſt Fruits and Flowers. But if the Sand predominate, it will require a conſtant ſupply of proper Soyls to enrich it.

SECT.

SECT. III.

Of the Improvement of ſuch Soyls.

THere are many parcels of Land lying near Towns, Villages, and Houſes, that are of that excellent mixture of Loam and other Earths, that they are capable to entertain moſt of the delicate Fruits, Flowers, and other Curioſities, that are fit to be planted or propagated in your beſt Partirs, without any other mixture or compoſition, other than convenient dung of Oxen, Cows, Sheep, Pullen, Pidgeons, and ſometimes old and rotten Horſe-dung, to preſerve it in its due and wonted fertility, it being by continual weeding and the attraction of the Plants you furniſh it withal, apt to ſterilize. So that where your ground is thus naturally fertile and prone to vegetate, you need take no other care than to apply proper Soyls or Compoſitions, according as the nature of your Plant requires, or to maintain it in its full vigour.

Claiy Land being cold, moiſt, and ſtiff, is to be converted by labour, and mixtures of a contrary nature, if you dig it often

often, the Sun, Rain, and Froſt will make it more friable and fertile: For take Clay and lay it on any other Land, it will in time diſſolve, and unite in minute parts with it, that you ſhall hardly diſcern it, ſo alſo it will be much altered by culture on its own Baſis, the wet being carefully drawn from it by declining Canals for that purpoſe, Water being the only thing that maintains its ſtubborn nature, if it reſt on it.

But to accelerate the operation, and make it ſpeedily more benign, Sand is an excellent Ingredient, eſpecially that taken up in the bottoms of Rivers, or where haſty currents have left it at the foot of Hills, or Sea-ſand where it may be had. Any old Thatch or corrupted Vegetables, as Weeds, Fern, *&c.* buried in the Trenches as you dig it, drains the wet from it and makes it more mellow. But above any thing Peat aſhes, Turf aſhes, or any aſhes proportionably, and well mixed is the higheſt improvement, you can add to your cold, ſtiff, and moiſt Land. There are ſeveral other additions that will improve it, as Rotten-wood, Saw-duſt, the bottoms of Piles of wood great and ſmall, but theſe being not to be had in any great quan-

quantity, will ſerve only in theſe Beds where you intend to plant your choiceſt Flowers, but Chalk, Lime, Marl, and ſuch like, although they ſweeten it at the firſt, yet in the end it unites with the Clay, and is ſoon converted into its own nature.

Chalky Land uſually yields a good rich ſurface, therefore you muſt avoid planting too deep in it, and where you can with conveniency, the ſinking your Walks; and with the ſame matter to raiſe your Borders, is a very good improvement of this ſort of Land. You may alſo deal with it as with the Claiy Land, though in a more moderate way, for Chalky Land is naturally cold, and therefore requires warm applications, and is alſo ſad, and will the better bear with light compoſts, which is the reaſon that Chalk is ſo great an improver of light, hot, and dry grounds, eſpecially having ſuffered a calcination.

Lands ſeated on Marl, are uſually very rich, although cold and heavy, you need not doubt of the depth of it: for the turning it up and expoſing it to the Air, converts it into good earth, a mixture of light and warm ſoyl exceedingly advantages it.

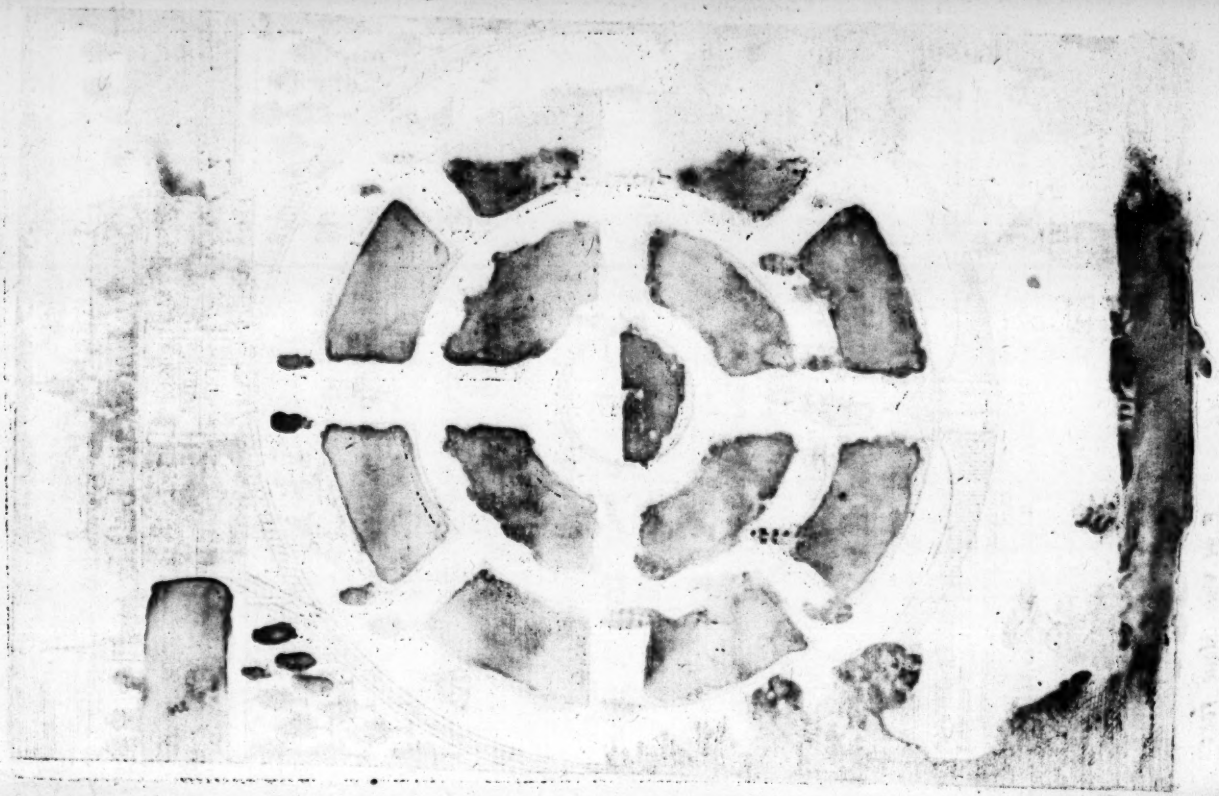
Sandy Lands, or Land that hath a competent mixture of Sand in it, is the warm-

eſt

eſt and lighteſt of all, and according to its fatneſs, it is the moſt free and apt to produce the moſt of Vegetables you plant in it. Sandy Lands are beſt improved by mixture of Chalk, Lime, Marle, the ſediments of Ponds, Lakes, or ſtanding Waters, and need a more conſtant ſupply of ſuch additions than any other, unleſs you have the command of ſome Spring or ſtream of water to irrigate it, and prevent the Suns exhaling the moiſture it ſo eaſily parts withal, for we may conſtantly obſerve in rainy Summers, what vaſt products Sandy Land will afford us, compared with the dry. The ſame you will find in your Gardens, but the hot dungs are here to be neglected, and the more cooling made uſe of.

There are ſeveral other ſorts of Land, that are known by ſeveral other names, which I might here enumerate, but theſe being the general, and moſt Lands falling under ſome or one of theſe capacities, I ſhall not trouble you with them, here brevity being my ſtudy.

But if your Lands or Grounds within the precinct of your Garden, be ſomewhat of a different nature or quality from theſe before mentioned, yet may thoſe general dire-



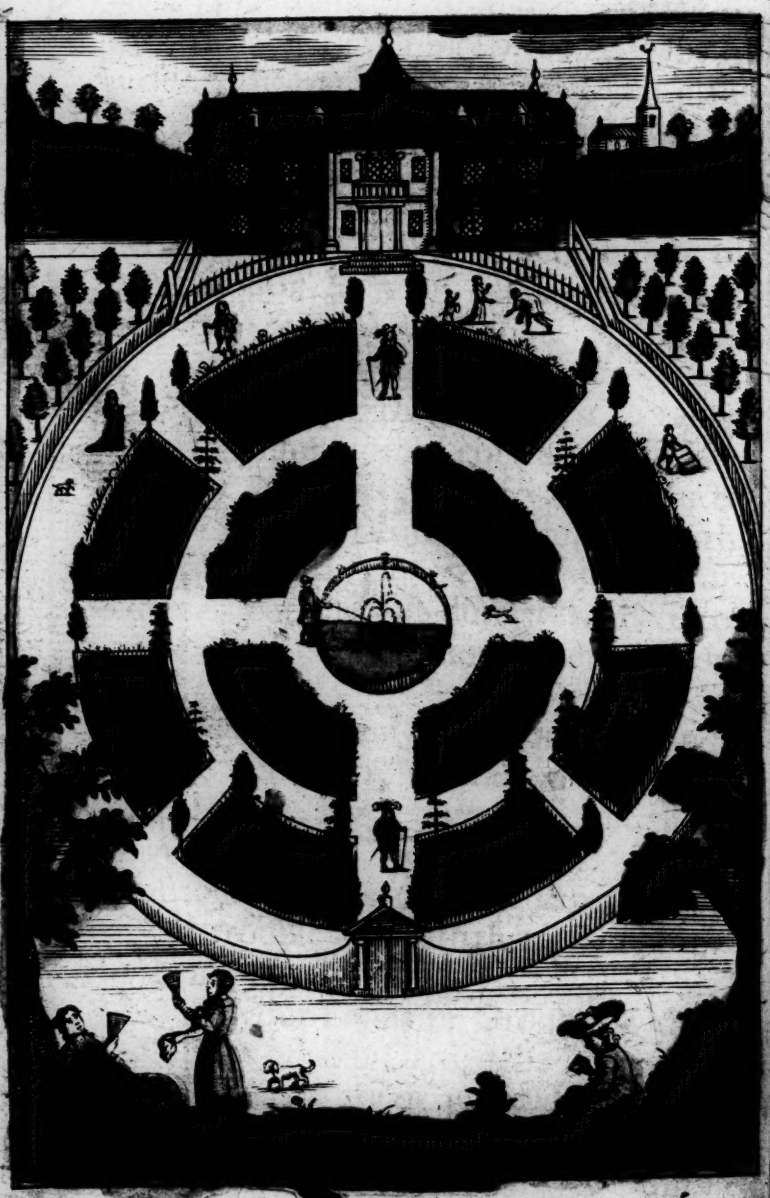


Fig 15. F. H. Van. Houe fec:

directions as concerning that Land it is neareſt of nature unto, ſerve for your Land. And if you have any Trees, Plants, or Flowers, that delight in Land different from the more general part of your Plantation, then may you compound your mould in ſome place proper for ſuch Plant; directions for which you will find diſperſed in this ſucceeding Tract, eſpecially when I come to treat of Eſculents.

CHAP. II.

Of the Form of a Garden, and its Fencing and Encloſing.

SECT. I.

Of the Form of a Garden.

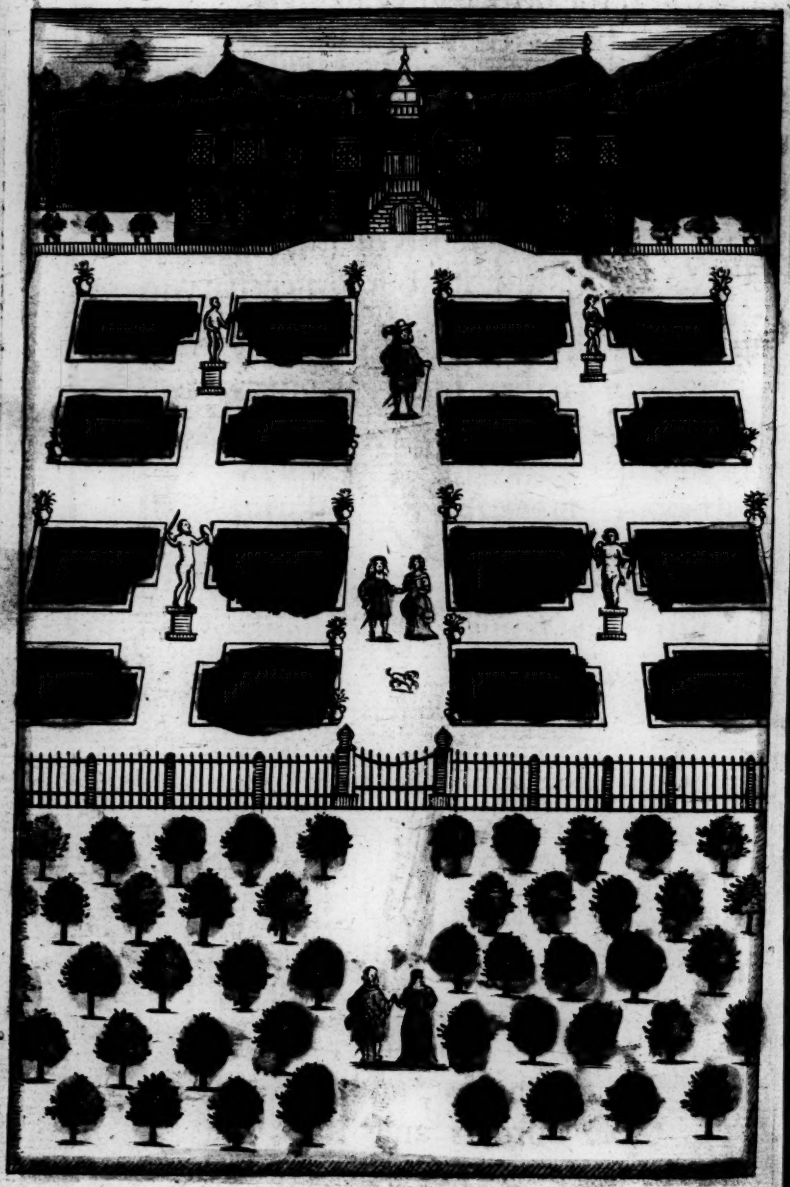
AS before was obſerved concerning the ſcituation, ſo now may it be as to the form, that if ye are already limited and bounded, by reaſon of the ſcituation of your houſe, and the contiguous parts about your intended plantation,

tation, you muſt caſt it into as good a form or model as you can, but if you are at liberty, then may you make your election of what form pleaſeth you beſt.

The Round is very pleaſant, and ſome curious Gardens there are of that Form in foreign parts. The Walls about ſuch a Garden are very good for fruit, the Winds being not ſo ſevere againſt a Round, as againſt a ſtreight Wall. The Walk alſo that circundates that Garden is not unpleaſant, for that you may walk as long as you pleaſe in it always forwards without any ſhort turning, ſome ſtreight Walks there may be that tend from the circumference to the Centre. The ſeveral quadrants may be ſub-divided and planted with Fruits, the borders of the round Walk, and the croſs Walks being ſufficient for Flowers and Plants of beauty and delight. At the Centre of this Garden may be planted a Fountain, or in defect of water a banquetting houſe or houſe of pleaſure.

A rude draught of ſuch a form is here preſented to your view, the outermoſt Walk being adorned with Cypreſs Trees, the inner parts of the Graſs Plats with Firr Trees, and the Quadrants within the leſſer Circle, planted with variety of Fruit Trees,





pg 17 F. H. Van Hoye fec.

Trees, and the principal Walks round and ſtreight, bordered with Flowers, and delightful Shrubs and Plants.

Encompaſſed with a Palliſade in the Centre of your Garden, is a Fountain of Spring water always flowing, ſerving not only to refreſh the Spirits of ſuch that delight in the ſight of it, but is neceſſary in dry and hot ſeaſons, to preſerve your choiceſt Plants from injury.

The Square is the moſt perfect and pleaſant form that you can lay your Garden into, where your ground will afford it, every Walk that is in it being ſtreight, and every Plant and Tree ſtanding in a direct Line, repreſents it to your Eye very pleaſing. The delight you take in walking in it being much the more as you are leſs careful: for when you walk in a round or circle, you are more ſubject to treſpaſs on the borders, without continual thoughts and obſervation of your Ground.

You may divide your Square into three parts by Palliſades, the long way beginning at your Houſe, the middle third part containing a large Gravel walk, adorn'd on each ſide with a border of your moſt Select Plants, Shrubs, and Flowers, between thoſe borders and the Palliſades,

green walks with Borders next the Palliſades, on which you may plant Perennial Greens, and your more ordinary Plants and Flowers.

The other two partitions of your Square you may convert the one of them into an Orchard, the other into a Kitchin Garden, which will be no ſmall Ornament to your middle Garden of pleaſure.

But if you are willing to celebrate ſo fair a ſpot of Ground as the whole Square to the delights of *Flora*, then may you divide it into leſſer Squares, and make of them Graſs-plots, leaving only borders on their confines for your variety of Plants.

The new mode of Gravel Walks and Graſs-plots, is fit only for ſuch Houſes or Palaces, that are ſcituated in Cities and great Towns, although they are now become preſidents for many ſtately Country Reſidencies, where they have baniſh'd out of their Gardens Flowers, the Miracles of Nature, and the beſt Ornaments that ever were diſcovered to make a Seat pleaſant. But it's hoped that this new, uſeleſs, and unpleaſant mode, will like many other vanities grow out of Faſhion.

A draught of the Square Garden I have here given you, which may be varied as every

every Deſigner pleaſeth, each principal Walk is bordered with Flowers, each principal Corner with Flower-pots, and the middle of the greater Square with Statues. The farther end fenced with a Palliſade, that the proſpect of the adjacent Orchard may not be loſt; where now the Statues ſtand, if Water be to be obtained, Fountains would be placed with more delight.

The infinite variety of Forms that might be drawn and here repreſented to you, would but encreaſe your charge, when perhaps every Builder may better pleaſe himſelf in the ſhape and contrivance of his Garden, better than any other can do for him.

But theſe few Rules are not amiſs to be obſerved, *viz.* That you endeavour to make the principal Entrance into your Garden, out of the beſt Room in your Houſe, or very near it, your Walks being places of divertiſement after a ſedentary repaſt. The Aromatick Odours they yield, pleaſant refreſhments after a groſs diet, and ſuch innocent Exerciſes, the beſt digeſtive to weak Stomachs. Let there be ſome other Door into your Garden, for Gardeners, Labourers, *&c.* And let your principal Walk extend it ſelf as far as you can

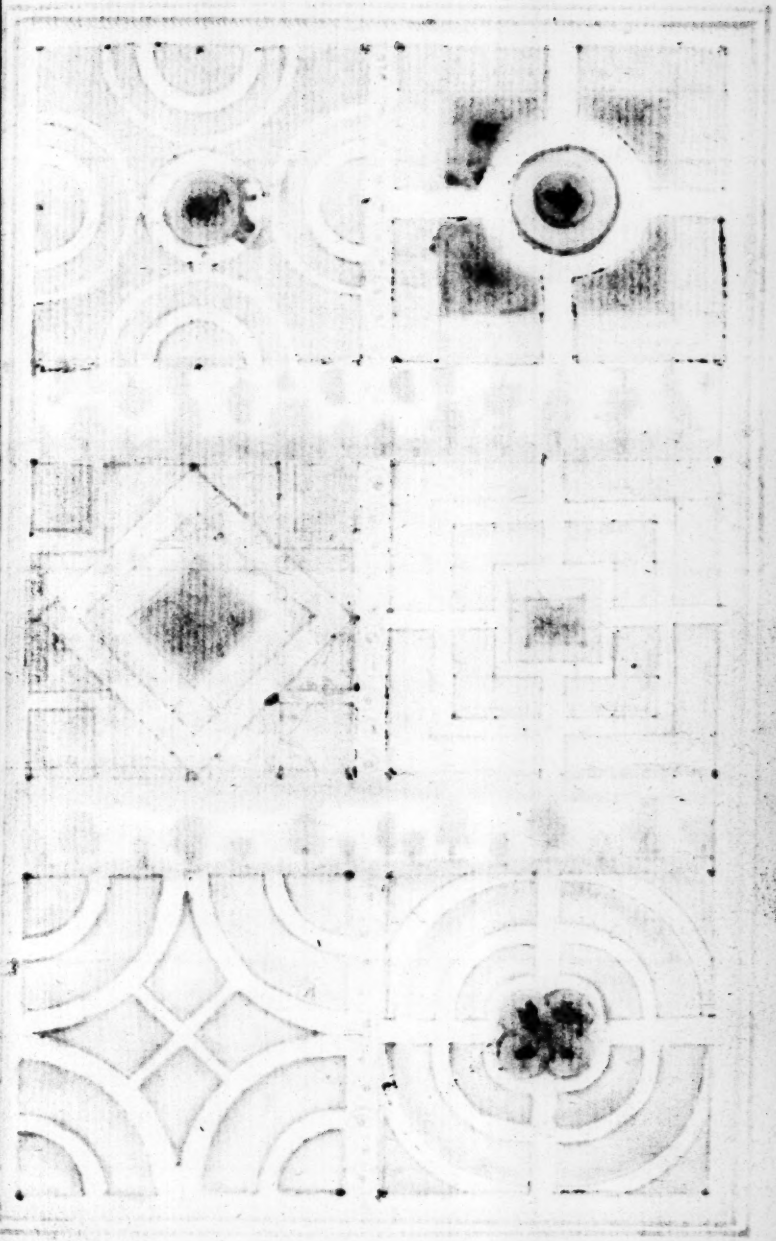
in length, directly from your Houſe, adorned with the choiceſt Plants for Beauty and Scent, and that there may be a ſucceſſion of them through the Year, not without Flower pots, which grace the beſt of Gardens.

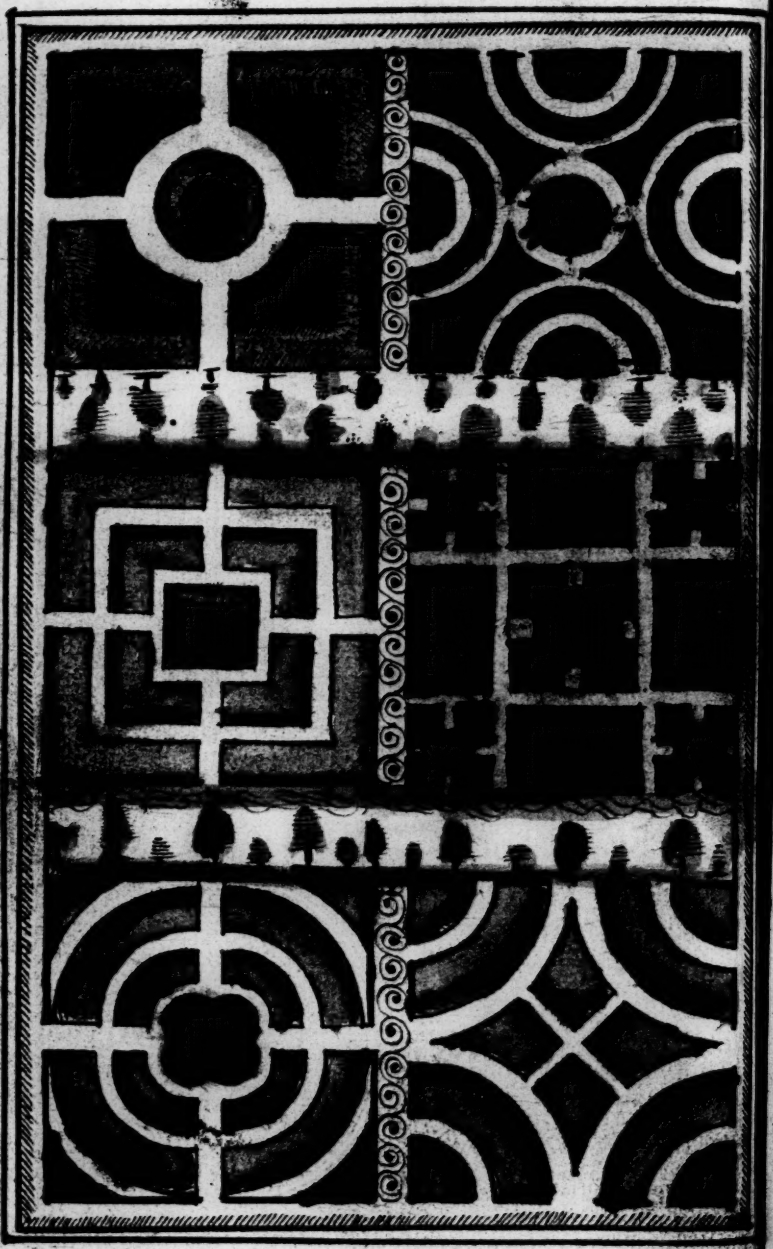
If your Ground you intend for a Garden, lye on the ſide of a Hill, your Walks may be made the one above the other, and be as Terraces the one to the other; the declining ſides of them, being either of Graſs alone or planted with Fruit.

If your Houſe ſtand on the ſide of a Hill, and you muſt make your Garden either above it or below it, then make your Garden below it, for it is much more pleaſant to view a Garden under the Eye than above it, and to deſcend into a Garden and aſcend into a Houſe, than on the contrary.

As for all other Forms and Scituations of Ground above your Houſe, you muſt vary your Models according to the place.

SECT.





SECT. II.

Of Fences and Incloſures to a Garden.

WHen you have diſcovered the beſt Land, and pleaſed your ſelf with the compleateſt Form you can imagine for your Garden; yet without a good Fence, to preſerve it from ſeveral Evils that uſually annoy it, your labour is but loſt. Your Fences muſt be conſidered of according to the place you reſide in and nature of the Soyl, and is either, of Brick, or Stone, of Earth, Pale, Palliſade, or Quick-ſetts.

Of all which the Brick-wall is the beſt, it being the warmeſt (except Board) and very dry and con-natural to Fruit. And where Brick are plenty, it is not a dear Fence, conſidering that their form much accelerates the raiſing your Wall, and their even joynts require but little Mortar. You may alſo make the Wall much thinner with Brick, than any other Material (Square Stone only excepted) becauſe you may make Nieches at a reaſonable diſtance, or Square Pillaſters on both ſides or only one ſide, which will ſupport the Wall, although very thin in the intervals: This Wall needs

1. *Of Brick-Walls.*

no other Coping than Bricks, ſet on edge ſide-ways without any over-hanging or dripping, as hath been uſed.

By which means of building them thin in the intervals with Nieches or Pillaſters, at fit diſtances and ſlender copings, almoſt half the materials are ſaved in the building of them, and moſt of the workmanſhip.

Theſe Walls are very kind to Fruits, under which they bear abundantly; the Nieches and Pillaſters conduce very much to the breaking off the cold Winds, and ſhelter the Fruit from them.

2. *Of Stone-Walls.*

Next unto the Brick, Stone-Walls are preferred, the Square hewn Stone out of the Quarry, eſpecially Sand or Free-ſtone, is the beſt, the cold white Stone like unto Chalk or Lime-Stone is not ſo good. The Rough Heath-Stone or Burre is very dry and warm, but by its unevenneſs is unconvenient to tack Trees againſt, unleſs you diſperſe here and there in the Building ſome ſmall ſquares of Timber, or Brick-bats, in the joynts whereof Nails will enter and take. Flints are very cold and uneven joynted, and therefore the worſt of all Stone for a Garden Fence.

All Stone Walls muſt be well coped with long Dung, leſt wet inſinuates it ſelf between

tween the Stones, and decay it in a little time. A coping of Tyle is the beſt, if made to carry off the drip 3 or 4 inches from the Wall.

In many places where Stone is dear, and Brick ſcarce, and Lime and Sand not near, Walls are often made by a Compoſt of Earth and Straw tempered with it. This Earth muſt be either of a clayiſh nature, or have a little mixture of Clay in it, it muſt be well wrought and mixed long with Dung or Straw, which ſerves to hold it together until it be throughly dry; and then according to the skill of the Workman, wrought up into a Wall and covered with Thatch, being not able to bear a more weighty Coping. 3. *Of Walls of Earth.*

Theſe Walls well wrought and well coped and preſerved dry will laſt many years, and very warm and kind to Fruits, that is, to ſuch that are content to be humble, theſe Walls being rarely built high.

In the building theſe Walls, pieces of Wood or Hooks of Iron ought to be placed in, at convenient diſtances, ſtanding three or four inches without the Wall, to which Poles or Rails are to be faſtned, and to them your Fruit-trees, there being no tacking Trees to the Wall it ſelf.

This way of Fencing is much used in some Parts, and somewhat resembles the *French* way of making Walls for Fruit; for what-ever they are made of, they are plastered over, and hooks of Iron or Sheeps shank-bones placed in the building of the Wall, at some convenient distance to affix the Poles unto, as in the small *French* piece called the *Planters Manual*, adapted only for that Countrey, may be observed. Also *Rapinus* at large describes the making of that Wall, and both of them prescribe the plastering of them, as well to destroy the vermin that would otherwise shelter themselves in the rotten cavities of those Mud-Walls, as to accelerate the maturation of your Fruits.

So that here in *England* where other materials are scarce, and such a stiff Loam in the place, these Mud-Walls may prove beneficial, not only for security, warmth and privacy, but for the advancement and melioration of your Fruits, more especially if Lime be not wanting to make a plaister to cover it after that *French* mode.

It is not improbable that a mixture of Loam, Lime, Sand and Gravel, or small Sand stones, may by being raised between two planks, and so by degrees to the height

of

of a Wall, and then well defended by a light coping, make a very good and durable Fence and Shelter for your beſt Fruits. This ſeems to be the ſame way that *Pliny* mentions. The Walls to be made in his time, which then had continued many Years, and not impaired, reſiſting all Weathers; he mentions Turrets and Sconces to have been made after this manner, *Lib.* 35. *Chap.* 14.

Good Oaken Timber ſawn into Pales make a very good Fence, and not dear where that Timber is plenty: Next unto Oak, Fir or Deal Boards will ſerve, but ſcarce any other Board will endure the mutability of the Weather long. 4. *Of Pales.*

Theſe Boards ought to be well ſeaſon'd, elſe will they ſhrink and chap exceedingly, which will be inconvenient, as well by rendring your Solitary Walks leſs private, as by admitting cold Breezes to your tender Fruits; but in caſe your Board do not meet in the dryeſt and hotteſt ſeaſons, you may add a ſmall Battel to each Interval, fixt to each Rail by Nails between the Boards, that the ſwelling and ſhrinking of the Board may not injure the Battel.

Theſe boarded Fences are the warmeſt for your tender Fruits, and maturates them be-

beyond any other, but being ſubject to decay, are not repairable without damage to your Trees.

5. *Of Palliſades.* I have already mentioned the moſt principal and beſt Fences for the outſides of your Garden, for Privacy, Security, and advantage to your Fruits. There are yet neceſſary other Fences for the cantoning or dividing your Garden into leſſer parts, for the ſeveral uſes you deſign them for, or for the ſecurity of ſome particular parts of your Garden, or Fruits or Flowers, from the hands of every one that may otherwiſe have liberty or occaſion to walk there, yet not to impede or diminiſh the pleaſure in viewing thoſe objects of delight thus defended.

Theſe open Fences are made of Board of about three or four inches broad, and three or four foot long, either nailed to, or let thorow two Rails, with heads cut either round or like a Lance, and painted white with Linſeed Oyl, and white Lead, two or three times over, to make them endure the Weather.

But the beſt material to make theſe Palliſades withal is Iron, ſo framed as are the Iron Balconies in *London*, ſave only that theſe appear above the Rails with ſquare

painted

painted Heads which ſeem moſt beautiful, by reaſon that Flowers and other delightſome plants appear ſo plain through them. This Fence is alſo permanent and needs no repair.

In imitation whereof, there is newly made in ſome few Gardens a Palliſade of Boards, of about three or four inches broad, which as before it was ſet flat-wiſe, each pale in the Palliſade is now ſet edge-wiſe, the upper Rail running through earch pale, and the foot cut with an Ox mouth, and ſet on an Arras Rail, either near the ground, or reſting on a ground-pinning of Brick. The head of each pale is about three or four inches above the upper Rail, divided into two parts, the middle vacancy being about one third part of the whole breadth, the two extream parts for about four or five inches, being cut with ſquare pyramidical points, do very much reſemble thoſe made of Iron. As you ſtand againſt them they appear open, and every thing very conſpicuous through them like the Iron; but as you view them obliquely they appear full, only their ſharp heads more open and not unpleaſant. Theſe Palliſades, although they require ſomewhat more timber and workmanſhip than the ordinary

ſoil,

ſoil, yet are by far the more compleat and beautiful, every motion of your Body from its place, begetting a variety in the object.

Theſe open Fences are much more pleaſant and uſeful in your Partirs and inward Gardens than cloſe Walls, for theſe prevent not your view of the whole, nor hinder the free air from your Plants, which is as neceſſary in ſome degree as warmth, which ought to be obtained from Shelters and Fences at a diſtance, not by too great a reverberation of heat, and ſtifling in the Summer for want of air, either of which proves fatal to moſt Flowers.

6. Of Quick Fences. Gardens are oftentimes ſecur'd by quick Fences, whereof the moſt eaſie to propagate is that of the white Thorn, which being well planted in double, treble, or more Cheſts or Rows of Plants, and kept weeded and defended for three or four years, will thrive very well in moſt ſorts of Land; and being kept clipp'd, ſheer'd, or cut with a ſharp hook, will grow ſo thick that a Bird cannot find its way through, and that from the ground to ſix or ſeven foot high, and proves a very great ſecurity againſt bad Weather, evil Neighbours and Cattel; but is a ſhelter for Snails

Snails and other Vermin that will conſtantly annoy your beſt Plants, and are not therefore to be planted near your Partir wherein you plant your beſt flowers.

A Quick Hedge of Holly is the moſt beautiful and moſt compact of any, but the tedioufneſs of its growth is enough to diſcourage any man from attempting its propagation, its ſeed being two years before they appear above the ground, and its Plants long before they let you know of their like or diſlike of the ſoil.

Pyracantha planted for a Fence, proves very ſtrong by reaſon of its ſharp thorns, and ſtubborn branches : *Sweet-bryar* alſo is very good, and makes a fragrant Fence, but the White-thorn will not give way to either of them, being eaſily propagated, moſt tonſile of any, durable, of a delicate colour, and early appearing in the Spring.

CHAP.

CHAP. III.

Of the Walks, Arbours, and Places of Repoſe in Gardens.

IT is not the leaſt part of the pleaſures of a Garden, to walk and refreſh your ſelf either with your Friends or Acquaintance, or elſe alone retired from the cares of the world, or apart from company that ſometimes may prove burthenſom to you, and when your own Laſſitude, or the Heat, Rain, or ſcorching Beams of the Sun, render the open Walks unpleaſant, to repoſe your ſelf under ſome pleaſant Tree, or in ſome Covert or Shade, until you are willing to try the Air again.

SECT. I.

Of Walks, and Materials for them.

1. *Stone-Walks.* WHerefore to accommodate you for all ſeaſons wet or dry, hot or cold, it is convenient to have Walks and Places

Places in your Garden proper for them. As for Walks, the beſt for the Winter and wet ſeaſons are thoſe paved with Stone, about the breadth of five foot in the midſt of a Gravel Walk, of about five or ſix foot Gravel on each ſide the ſtone, or of Graſs, which you pleaſe, for on theſe flat Stones may you walk ſecurely under-foot in all weathers, without prejudice to your ſelf or Walks.

2. *Gravel-Walks.*

Next unto the paved ſtone are the Gravel Walks to be preferred, which if made with a fine skreened red Gravel, do very much adorn your Garden, and being laid round and kept rolled with a Stone Roller, caſt off the Water, and are very uſeful in moiſt weather to walk on.

The Gravel Walks are beſt under your Fruit Walks, becauſe the Beams or Rays of the Sun reflect from them againſt the Walls, much better than from Graſs, and very much advantage your Fruit.

The great inconveniences theſe Walks are ſubject unto are Weeds and Moiſture: To prevent the Weeds, you muſt be ſure to remove all manner of Earth clean from the place before you bring in your Gravel, and in caſe the Earth be not ſtiff enough of it ſelf, it would not be amiſs to ſup-

port

port the ſides with two or three courſes of Brick, or at leaſt a Brick ſet on end edge by edge, to prevent the falling in or mixture of the ſide Earth with your Gravel; yet ſo that the upper part of your Brick may be an inch beneath the ſurface of your Walk, that it may not be diſcerned. If your Ground be good and apt to vegetate, ſeven or eight inches deep ought your Gravel to lye, leſt the Weeds find their way through: you ought alſo to cleanſe the Ground under from the Roots of Graſs, Weeds, as Nettles, Docks, *&c.* leſt they find their way through the Gravel. You may fill your Walk with ordinary courſe unskreened Gravel five or ſix inches, and after that is levelled, then lay on your laſt Courſe of fine Gravel, and roll it well: if your upper Courſe of Gravel be two or three inches thick, and at any time your Walk grow diſcoloured or moſſy, you may ſtir it with a Spade as far as the fine Gravel lyes, and finely rake it, then roll it again, and it will appear to be as freſh as at the firſt.

The other inconvenience theſe Walks are ſubject unto is Moiſture, eſpecially after a Froſt, which very much looſens the Gravel, and long ſoaking Rains make it apt to

to ſtick to your Feet: For the beſt red Gravel hath a mixture of Clay or Loam in it, which makes it in dry weather bind the better; to prevent which, ſeveral Expedients are lately made uſe of. Some do grind or beat ſmall the ſhells of fiſh gathered on the Sea-ſhore, and therewith add a thin coat on the Gravel, which by conſtant rolling incorporates with it, and is not apt to adhere to your Shooes, as is the Gravel it ſelf. Others that live near to Brick-kilns, make uſe of the refuſe parts of Bricks that are under-burnt, which will eaſily pulverize, and lay that on the Gravel-walks, which prevents the ſame inconvenience, and adds much to the beauty of your Walk, and is eaſily renewed as there is occaſion.

On the edge of your Gravel-walks, you may lay on each ſide a narrow Walk of Turf for your uſe in hot weather, or when you are willing to favour your Feet or your Gravel, which being kept out ſtreight on the edges, beautifies your Gravel.

But if you will have your Walk only Gravel, then will it be neceſſary to edge it with Brick three or four inches above the ſurface: to prevent Earth or Rubbiſh from intermixing with it, Bricks ſet on

end ſide by ſide, is the ſecureſt and moſt laſting way for this purpoſe.

3. *Green Walks.* Walks of Graſs are very pleaſant, and much to be preferred in the Summer to any of the other, being cold and eaſie to the Feet. They are either made by laying them with Turf, or by raking them fine, and ſowing them with Hay-duſt or Seed (which may be had at the bottom of a Hay-mow or Rick) and well rolled and weeded from all groſs Weeds, will ſoon become a fine Graſs-walk; if theſe Walks alſo be laid a little rounding, they will caſt off the Water the better, and be more commodious for your uſe than if flat.

A Water Table on each ſide, of two or three inches deep, cut every Year anew, not only receives the waſte Water, but preſerves the Graſs or Weeds from mixing with your Borders, and preſents your Walk much more pleaſant to your eye, than if it were otherwiſe.

To deſtroy Weeds in the Gravel-Walks or paved Walks, where you cannot conveniently eradicate them, you muſt water it with very ſalt Water, or with the Liquor they have at the Salters, which they call *Bittern*, which abſolutely deſtroys all vegetation, where it is caſt in an indifferent good quantity.

It

It is none of the leaſt oblectations a Garden affords, to have Terrace Walks, on which you have the benefit of the Air, and proſpect on your Garden. Theſe in former Ages (and now alſo in more hot Countreys) were much celebrated, the *Hortipenſules* or *Pendantgardens* were after this manner made above the ordinary level, for the advantage of the Air and pleaſure of the Eye, and ſomewhat to add to the magnificence of the Place, being very Beautiful as well as Commodious. 4. *Of Terrace-walks.*

They are uſually made where much Earth or Rubbiſh is to ſpare, which would coſt time and labour to remove, and here is diſpoſed of to advantage, with the only expence of a Wall on the out-ſide to ſupport it, or if you pleaſe on both, but the inner ſide to your Garden may be made declining and clothed with Turf. The Wall on the out-ſide ſurmounting the top of the Walk about three foot, and on the edge towards your Garden may be ſet a Rail, or Rail and Balliſters, or a Palliſade, or a quick tonſile hedge of about the ſame height the Wall is of, that neither ſide prevent the Air nor impede your proſpect.

In ſome Gardens where Water is at your

command, the ſinking of an Aquæduct or Piſcary will afford you materials for your Terrace-walk, both of which are beſt and moſt proper to be made at the fartheſt diſtance from your Houſe.

SECT. II.

Of Arbours, and Places of Repoſe.

TO make your Garden pleaſant at all times and in all ſeaſons, either in reſpect of the great variety of Weather, or your own diſpoſition or indiſpoſition, it will be very neceſſary to accommodate it with places of ſhade, to skreen you from the ſcorching Sun-Beams, Canopies to preſerve you from the Rain, and Boxes to ſeclude you from the too cold Breezes: That although you are not willing to expoſe your ſelf too much in the intemperate Air, or your preſent inability or unaptneſs for a Walk be ſuch, that you cannot with delight enjoy it, yet that by them you may not loſe thoſe exhilerating pleaſures your Garden moſt times affords.

1. Of Arbours. For cool Receſſes in the hotteſt times, it hath been uſual to erect or frame Arbours with

with Poles or Rods, and plant them about with ſhady Trees, which are an Ornament to ſome Gardens, but to be rejected, 1. Becauſe they require much repair, and care to preſerve them; for in your Garden of pleaſure you ought to be frugal of coſt and pains, leſt your delights become occaſions of prodigality, and your recreations burthenſome to you. 2. Becauſe the Seats are apt to be moiſt and foul, it being apt to impair your health to ſit on a cold Seat, Salubrity being one of the Advantages expected from a Garden. 3. After a ſhower in the Summer, is the pleaſanteſt time to recreate your Senſes amongſt your odorous Plants, and then this place of receſs is wholly uſeleſs, the dripping continuing long after the ſhower. 4. The uſual cool Breezes that you will ſenſibly feel in thoſe Arbors, balance all the conveniences you can expect from them.

But if the Weather and time of the day invite you to ſit in the Air without inconvenience, a Seat under the ſhade of ſome *Platanus*, *Lin-Tree*, or the like, is much more pleaſant, than to be hood-winked in an Arbor.

2. *of Seats.*

You may have a Seat made of thin and light materials, and painted with Oyl of a

white colour, or as beſt pleaſes your fancy, which may be moveable with a little help, and placed ſometimes in one place and ſometimes in another as the Weather happens. This Seat may be made cloſe behind and covered, that being ſet with the back to the Wind, will be both warm and dry.

In the Nieches of your Wall may you place Seats covered over, that you may reſt your ſelf in at your pleaſure: At the ends of your Walks are the moſt proper places for ſuch Seats, that whilſt you ſit in either of them, you have the view of your Garden.

The beſt Form for theſe Seats is round, the one ſemicircle within the Wall, the other without with a *Cupulo*, the outward part to be ſupported by three or four, or more columns of Timber or Stone, the other part reſting on the Wall, the top covered with Lead, Slate or Shingle, with its due Corniſh about that part that is off from the Wall.

Or you may make them of a long ſquare Form, about two foot in the Niech of the Wall and as much without, covered as the round, but caſting the drip ſide-ways or backward.

Ha-

Having ſeveral of theſe Seats facing to each Coaſt, be the Wind or Sun either way, you have a place to defend your ſelf from it.

You may alſo cover your Benches or Stools with Mat, and lay the Floors with Board, which will much conduce to your own eaſe and health.

Arbours, Benches, and Seats are very neceſſary, being preſent expedients for them that are weary; but that which crowns the pleaſures of a Garden is a place of repoſe, where neither Wind, Rain, Heat, nor Cold can annoy you. 3 *Of Pleaſure-houſes.*

This ſmall Edifice, uſually term'd a Pleaſure-houſe or Banquetting-houſe, may be made at ſome remote Angle of your Garden: For the more remote it is from your Houſe, the more private will you be from the frequent diſturbances of your Family or Acquaintance, and being made at an Angle, part within your Garden and part without, you will have the priviledges and advantages of Air and View, which otherwiſe you will want, and which render it much more pleaſant than to be without them.

The Windows and Doors, the one or other reſpecting every Coaſt, may be gla-

zed with the beſt and moſt tranſparent Glaſs, to repreſent every Object through it the more ſplendid, with Skreens of printed and painted Sarcenet, to prevent in the day, and ſhutters of thin Wainſcot, in the night, others from diſturbing your ſolitary Repoſe.

Alſo you may reap the pleaſure and advantage of the Air from either Coaſt, by opening that ſide of your ſmall Edifice, from whence you would receive it, excluding on the other ſide that which might otherwiſe annoy you.

4. Of Repoſitories for tender Plants.

In the other corner of your Garden, or ſome oppoſite place to ſuch Pleaſure-houſes, may you erect another of the ſame Form to anſwer it as to your view, which may ſerve as a place to preſerve your tender Plants in, during the extremity of the Winter, and it is uſually term'd a *Green-houſe*, becauſe ſeveral Winter Greens are therein preſerved, that will not endure the ſeverity of that ſeaſon; in it alſo may you diſpoſe on ſhelves your dry Roots of Flowers and Seeds, until the time of the Year mind you of interring them.

On theſe ſmall Edifices may you beſtow what coſt you can afford, and make them

(as

(as they deserve to be) the principal Ornaments of your Ville.

5. *Of Mounts.*

It is not unusual to raise a Mount with the waste Earth or Rubbish, you may otherwise happen to be troubled withal, at some convenient distance from your House, on which as on your Terrace-walks you have the advantage of the Air and prospect, and whereon you may erect a *Pleasure* or *Banquetting-house*, or such like place of Repose.

The most famous of this kind is that near *Marlborough*, whether first raised by Art or Nature is not yet determined, however it hath a most pleasant and easie ascent, and from the Summit whereof you have a good Air and a fair prospect.

CHAP.

CHAP. IV.

Of Springs, Rivers, Fountains, Water-works, and Grotto's, neceſſary for a Garden.

IT is not to be denied, that a kind and fruitful Soil may produce all ſorts of Plants proper for a Garden of pleaſure, uſe, or advantage, which may render ſuch a place delightful; yet cannot ſuch a Garden ever be ſaid to be complete, nor in its full ſplendour and beauty, without this Element of Water. Wherefore *Rapinus* adviſeth that,

You then who would your Villa's Grace augment,
And on its honour always are intent;
You who employ your time to cultivate
Your Gardens, and to make their glory great,
Among your Groves and Flowers let Water flow,
Water's the Soul of Groves and Flowers too.

Beſides the particular uſes you may put it to in watring your ſeveral Gardens, it is very pleaſant to have your Piſcaries, Rivulets,

Rivulets, Fountains, *&c.* about your Ville.

SECT. I.

Of Springs.

MAny pleaſant Seats, Vills, and Gardens there are, that are very well ſituate for air and proſpect, that are of themſelves dry, which defect may be ſupplied from Springs of water riſing at ſome diſtance, and may be conveyed by Pipes to ſuch places in your Ville or Garden as you deſire.

Of Pipes for water.

In places where Wood is plenty, the Elm is the moſt proper material to make Pipes withal for the conveyance of water from the Spring to your Garden, not being ſubject to be torn by froſt, as are the Leaden or Earthen Pipes, either of which you muſt be ſure to lay deep enough below the ſurface of the Earth, that the froſt may not reach them.

Leaden Pipes are the moſt convenient where water is to be raiſed to any conſiderable height, being not apt to grow leaky, nor to decay, but you muſt be ſure to

to lay them deep in clay as you can, but not in any mixture of Lime or ſuch like, leſt it decay the metal: alſo you muſt have a Turn-cock at the loweſt part of your Pipe, where muſt be a paſſage, that out of it you may let the water at the beginning of a Froſt, to prevent the pipes from breaking.

Earthen Pipes may be made of about three foot in length, and made to fit the one into the other; and as they are laid deep in a ſoft bed of earth, clay, or ſand, the joynts may be cloſed with a cement of quick-Lime, Linſeed-Oyl, and Cotten-wool, and bound about the joynt with a piece of Leather, and a turn or two of Pack-thread: but theſe Pipes are not for forcing the water to any height, being apt to break, but are very neceſſary cheap and ſweet for the conveyance of any Spring without force to the place you deſire.

Sometimes it happens that Springs lye concealed in the earth, which may, if diſcovered, prove very uſeful in your Ville, and pleaſant in your Garden, which to diſcover, obſerve the Precepts of *Ratinus*,

Where

Where ſmall declining Hillocks you perceive,
Or any Soyl where Flags and Ruſhes live,
Where the fat ground a ſhiny moiſture yields,
If Weeds and prickly Sedge o'reſpread the Fields;
Their hidden Springs with confidence expect,
For Sedgy places will to Springs direct.

Alſo ſeveral Ruſticks there are, that can direct you to the neareſt Spring being acquainted with the nature of the ſoil and place.

Theſe if they lye above or level with your Garden, may be brought by pipes into it; but if they happen to lye below it, then muſt you erect Ciſterns or Receptacles above your Springs, that they may command your Garden, and raiſe the water into them by Machins made for that purpoſe, moved by men, horſes, or the wind; which when full, may ſerve to ſupply your Garden for a certain time, and when expired, the ſaid Ciſterns may be again filled by the former means.

SECT.

SECT. II.

Of Rivers.

ALthough ſmall Cryſtalline Springs brought in Pipes may be ſufficient to irrigate your Groves and Plants, and ſupply your Grotts and Fountains, and add very much to the ſplendor of your Garden; yet,

——If my advice you take,
In the low Places of your Garden make,
Beſides the other Springs, large Trenches too,
To which from every part the Streams may flow.
For little Brooks and Springs are not ſo good,
Rapinus. *Nor pleaſe ſo much as a more noble Flood.*

A fair Stream or Current flowing through or near your Garden, adds much to the Glory and Pleaſure of it: On the banks of it may you plant ſeveral aquatick Exoticks, and have your ſeats or places of repoſe under their Umbrage, and there ſatiate your ſelf with the view of the Curling Streams and its nimble Inhabitants. Theſe Gliding Streams refrigerate the Air in a Sum-

Summer evening, and render their banks ſo pleaſant, that they become reſiſtleſs Charms to your Senſes, by the murmuring Noiſe, the Undulation of the Water, the verdant Banks and Shades over them, the ſporting Fiſh confin'd within your own limits, the beautiful Swans, and by the pleaſant notes of ſinging Birds, that delight in Groves on the Banks of ſuch Rivulets.

Where ſuch a Stream or Rivulet cannot naturally glide through your Garden but near unto it, it's probable that part of it may be raiſed by ſome Machine, at ſome diſtance from your Garden, and by an Aquæduct conveyed through it, which will be more commodious (the charge only excepted in the bringing it thither) than the natural Current. 1. Becauſe natural Currents are uſually in the loweſt grounds, which are not ſo proper for a Garden, as a declining or ground above the level of the adjacent Lands. 2. For that an Artificial Current is not ſubject to thoſe extravagancies, that the natural uſually are, by over-flowing after haſty Rains. 3. Thoſe waters that are brought by Art are eaſily carried off again, and may be conducted to ſeveral parts of your Garden,

on

on the edges of your declining Walks, whether they decline little or much; if but little, then may Canals be made in the natural Earth, without any danger of decay or wearing, as *Rapinus* obſerved of the Water running through the Gardens of *Lian Court.*

For by the Gardens ſide, the Rivers paſs,
From no ſteep Cliff, but down a bank of Graſs.

But if your Garden lye on a more declining Bank, then are your Aquæducts to be paved and edged with Stone or Brick, leſt the Velocity of the Current by degrees eat away the Earth before it; theſe Aquæducts may be carried almoſt level, and have their Precipices at ſeveral diſtances, as the form of your Garden will bear: Theſe Water-falls will appear very pleaſant if made broad at the end, as the ſame Poet tells you,

Nor ſhould it leſs deſerve of our eſteem,
When from an even Bed diffus'd the ſtream,
Runs down a poliſh'd Rock, and as it flows,
Like Linnen in the Air expanded ſhows.

4. Wa-

4. Waters brought in by Art may better be confin'd in Canals regularly made, and Fiſh kept in them eaſier preſerved than in the natural, where inundations uſually unſtock your Piſcaries; therefore if you can, chooſe rather to bring a fair Current of Water through your Garden, above the level of the main River; if it cannot be done by an ordinary Aquæduct, yet may it by an Engin placed in the River, where the one part of the Water ſhall conſtantly raiſe another for your purpoſe, the manner of making and ordering whereof is not proper for this place.

——*Vide Syſtema Agriculturæ.*

SECT. III.

Of Fountains.

Fountains are principal Ornaments in a Garden; ſcarce a famous Garden in *Europe* without its *Fountains*, which were primarily intended for Bathing, and are in the more Southern Countries uſed for that purpoſe to this day. The *Italians* beſtow very great coſt in Beautifying them

for that uſe: the *French* are very prodigal in their Expences about Fountains: and ſeveral curious Gardens in *England* have them; but here only for Ornament, they are generally made of Stone, ſome ſquare, others round or oval, and of divers other forms, ſome flat in the bottom, others round like a Baſon.

Into ſome the Water is caſt by Pipes from the ſides, out of the Mouths of ſeveral figures repreſenting Animals, or out of the Pipes of *Eurs* of Stone ſtanding on the Brim of the Fountain, or the Water is caſt from ſome *Figure* or *Statue* erected in the middle of the *Fountain*, or from *Pipes* ſtanding upright in the midſt of it.

There muſt alſo be waſte Pipes or Cavities to convey away the Water from ſuch Fountains, which muſt be ſo made that at your pleaſure you may drain your Fountain and cleanſe it, and muſt be of capacity to carry off all the Water as it comes, leſt it annoy your Garden, for the greater quantity of Water you have, the more pleaſant will it appear.

Plenty in Fountains always graceful ſhows,
And greateſt Beauty from abundance flows.

But

But where neither Springs nor Rivers can be obtained to compleat your pleaſures, yet for uſe and a little for delight may Water be procured from the Heavens, by preſerving the drips of the Houſe, and conveying it to ſome Ciſtern made for that purpoſe in your Garden which may reſemble a Fountain, or make a fair receptacle in your Garden for the Water that may be gained from the declining Walks of your Garden or from adjacent Hills, as *Rapinus* directs.

But if the Place you live in be ſo dry,
That neither Springs nor Rivers they are nigh,
Then at ſome diſtance from your Garden make,
Within the gaping Earth a ſpacious Lake,
That like a Magazine may comprehend
The aſſembled Floods, which from the Hills deſcend.

Here follows a

DESCRIPTION

Of several Sorts of

FOUNTAINS.

I. *THe Ball raised by a Spout of Water.*

II. *The Water representing a double Glass, the one over the other.*

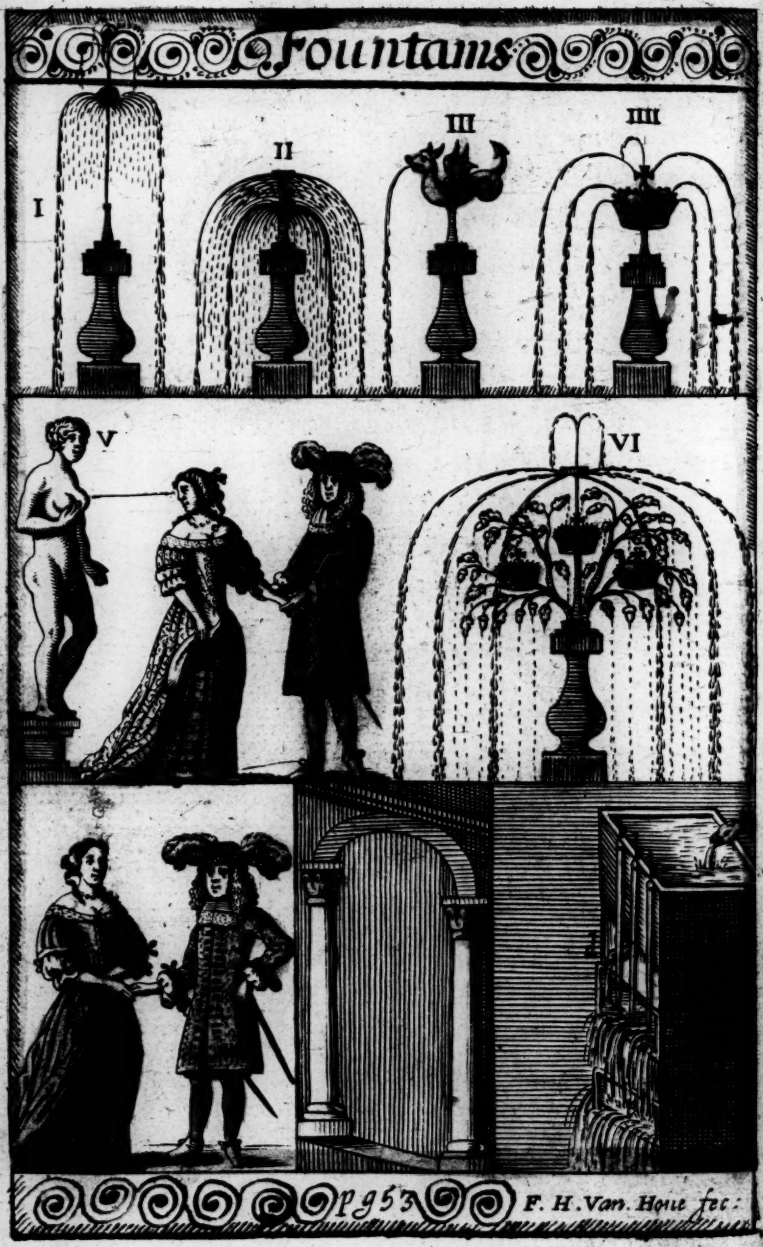
III. *A Dragon or such like, casting Water out of its mouth, as it runs round on the Spindle.*

IV. *A Crown casting Water out of several Pipes as it runs round*

V. *A Statue of a Woman, that at the turning of a private Cock, shall cast Water out of her Nipples into the Spectators Faces.*

VI. *The Royal Oak with Leaves, Acorns, and Crowns dropping, and several small spouts round the top.*

VII. *The Cistern into which the Water flows*


Fountams
I
II
III
IIII
V
VI
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F. H. Van. Hove fec:

flows by the Pipe A. *the Air iſſueth out at the Pipe* b b b. *the ends whereof make the Muſical ſounds in the Trough of Water at* C. *which is ſupplied with Water by the Pipe* D. *which in time dreins the Ciſtern, which waſte Water precipitates into* E. *and from* E. *into the common Drein.*

Theſe Waters are to be preferr'd for the irrigation of your Plants to any other, and in caſe you make your Ciſterns well, and cement the joynts of your Stone with *Pariſian Cement*, or with our own Lime compounded with Linſeed Oyl, they will retain the Water for a long time.

SECT. IV.

Of Water-works.

BEſides thoſe natural courſes that are propoſed, for the leading the water from the one place of your Garden to the other, after it is entred into its limits, there are ſeveral ways of ordering it, where it is either naturally or artificially advanced above the level of your Garden.

The docile Streams will any ſhape put on,
Rapinus. *A thouſand different courſes they will run.*

Therefore the Water muſt be conveyed from ſome *Ciſtern* or Conduit, ſtanding above your Garden at ſome diſtance by Pipes, or elſe it muſt by ſome Artifice be raiſed into a *Ciſtern* of Lead over ſome Lodge or *Grot* in your Garden, that from thence it may by ſmaller Pipes be ſecretly conveyed to your ſeveral Works.

As to the Fountains where it may be caſt through various figures, as before was hinted in the laſt Section.

Or it may be made to riſe in the midſt of a Fountain or your Grotto, through the branches of an Artificial Tree, each Sprig being hollow, that it may continually drop with Spouts on the top, for the erecting of greater quantities of water.

Or it may riſe in one ſmall upright Stream, carrying a *Ball* of wood on it, which being exactly round and placed on the mouth of the Pipe, and the Water by the opening of a ſtop-cock made for that purpoſe admitted by degrees, the Ball will riſe and be ſupported by the Spout of water, to five, ſix, or ſeven foot high, after the

the ſame manner as a ſingle Peaſe may be elevated by your Breath on a Straw; but in caſe your Ball be apt to fall, then may you perforate it through the Centre ſmoothly and exactly in the middle, and place this ſmall hole directly on the middle of the mouth of the Pipe, and ſo raiſe the *Ball* by degrees, and the ſmall ſpout of water that paſſes through the Centre of the *Ball*, will preſerve it in its due poſture.

By a *Copper Cylinder* made to fit on the top of the Pipe, out of which the water violently flows, to take off and on at pleaſure, may you ſometimes make the water reſemble a large *Glaſs* inverted, by placing a flat piece of Copper on the top of the *Cylinder*, and leaving only a narrow circular paſſage under it for the water freely to flow out of it on every ſide. Another Pipe or Cylinder of a leſſer ſize, made to riſe off the middle of the ſaid flat piece of Copper or Cap, with a like Cap on the top of it and a paſſage left as before, will cauſe the water iſſuing out of both theſe Cylinders the one over the other, to preſent a *Glaſs* within a Glaſs both inverted.

Alſo *Crowns*, *Birds*, *Beaſts*, made of light

Braſs or Copper, hollow and eaſie to turn on a Cylinder, the one end of the Cylinder is to be ſet on the top of the Water Pipe, the other end to force the Water with certain thin Veins in the inſide of your hollow Figure, which will make it to move ſwiftly about, ejecting the water out of the ſides or Mouth of the Figures in its motion, which is very pleaſant to behold.

Secret Pipes may be under the Ground, the ends not appearing above it, that when any Ladies unawares or caſually walk or ſtand over them, by the turning of a ſtop-cock you may force the Water upright under their Coats to their ſudden ſurprize.

You may alſo place on Pedeſtals of about three foot high, ſeveral Figures at about three foot diſtance, ten or twenty of a ſide: the interval between theſe Figures may be 8 or 10 f ot over. Through theſe Pedeſtals and Figures ſmall Pipes muſt be brought, that the Water may out of the Mouth of the Figures be ejected into the Air, the one Figure directing it towards its oppoſite Figure, beyond it and a little ſideways, ſo that at the turning of a ſtop-cock, each Figure ſhall caſt out a ſtream of water over like a rain-bow, that you may walk under theſe Spouts as under

ſo

ſo many Arches, without any drop falling on you.

But that which is very delightful is the ſinging of the Nightingal, exactly imitated by the motion of the Water, and is thus performed: In ſome Cavity of your Grott or other Edifice where you deſire at any time to hear this Muſick, you muſt place a large Ciſtern of Lead, containing ten, twenty, or thirty Gallons, as you pleaſe: This Ciſtern muſt be well cloſed on every part (except the uſeful paſſages for Pipes) into it: near the top muſt the Water be let in freely through a Pipe of about an inch diameter; then you muſt have alſo near the top, two, three, or four ſmall Pipes iſſuing out, tending a little downwards, at the end of which you muſt fix your Pipes made of Braſs or other metal, made before you fix them like an ordinary *Fiſtula*, wherewith Children exerciſe themſelves in their paſtimes, ſo that when you try it with your Breath, and hold the lower end in Water, it ſhall pipe and chuck as the Nightingal ſometimes doth; you may make two, three, or four of theſe of ſeveral ſizes, the biggeſt not large, and they will give ſome diſtinction in ſound, theſe being fixed to the ends of the ſmall Pipes iſſuing out of your Ciſtern,

ſtern, and the lower ends of them dipping into a trough of Lead a little below the bottom of the Ciſtern; when by the turning of a ſtop cock the Water flows into the Ciſtern, it expelleth the Air through theſe Pipes, which give you your deſired Muſick, until your Ciſtern be full, then muſt you ſtop the Cock, that the Ciſtern may empty it ſelf again, and be ready for another time.

The Pipe through which it empties it ſelf may be at the bottom of the Ciſtern, of about the diameter of one third part of an inch, ſo that the Pipe that ſupplies the Ciſtern with Water, muſt of neceſſity be of Capacity ſufficient to afford Water enough for this under Pipe, and to enforce Air for the muſical Pipes, therefore this emptying Pipe you may leſſen as you find occaſion.

The Water that runs through this lower Pipe, may deſcend into the Trough that is under the muſical Pipes, to ſupply that with Water.

Inſtead of this lower Pipe, you may have a Siphon made in your Ciſtern, the inner foot of it to reach the bottom of the inſide, the neck thereof to be near to the top of it, but not altogether ſo high, the outer

outer foot of it ſomewhat lower than the bottom, that when the water flows into the Ciſtern, and ſtops the inner foot of the Siphon, the Air forthwith gives you your Muſick until the Ciſtern be full, then of its ſelf the water paſſes through the Siphon until the Ciſtern be empty. In this way leſs water will make your Muſick, becauſe there is no decreaſe of it until the Ciſtern be filled, but then you muſt not deſiſt until it be full, elſe it will not flow out of the Siphon. You muſt alſo ſupply the Trough before your muſical Pipes with water from ſome other Pipe, therefore the former way is the more facile.

By this means may you make many Muſical Artificial Sounds, and to continue in proportion according to the quantity of your Water and capacity of your Ciſtern, the Water that flows in waſte from it, being made to fall from one precipice to another, which with its murmuring noiſe intermixed with the Muſical Pipes, makes an excellent charming harmony, eſpecially none of it being in view, but concealed in Rock-work made for that purpoſe.

SECT.

SECT. V.

Of Grotto's.

IT oftentimes happens that in theſe *Northern Climes*, the *Æſtival* heats are more troubleſome than they are nearer the *Zodiack*, the Sun continuing here longer above the *Horizon* in the Summer ſeaſon, than in thoſe parts, which occaſions that intemperancy that many times we are ſenſible of, for as we have leſs of the preſence of the Sun in the Winter, ſo have we that defect ſupplied in the Summer.

But thoſe that inhabit more Southerly, and have the Sun more perpendicularly over them, are more ſenſible of the acute heat of that bright Orb about the middle of the day, generally than we are, and therefore about the heat of the day, they uſually ſequeſter themſelves from their ordinary occupations, and betake themſelves to their ſhades and cool places of receſs for ſome few hours.

Such that have convenient places in their Villes, make themſelves Grotto's or Caves in the Earth for that only purpoſe, on which ſome have beſtowed ſo much coſt

coſt and labour that thoſe Grotts have been the object of admiration of, and part of the Subject of ſeveral Hiſtories written by ſeveral Travellers and Strangers, as are their Baths and Fountains.

For the ſame reaſon may our Grots be as neceſſary for us, to repoſe our ſelves in the time of our Summer faint heats, although they are not here ſo conſtant every year as in thoſe parts, yet are they leſs tolerable, for want of theſe nocturnal breezes they uſually enjoy.

Therefore either in the ſide of ſome declive of a Hill, or under ſome Mount or Terrace artificially raiſed, may you make a place of repoſe, cool and freſh in the greateſt heats. It may be arched over with ſtone or brick, and you may give it what light or entrance you pleaſe. You may make ſecret rooms and paſſages within it, and in the outer Room may you have all thoſe before mentioned Water-works, for your own or your friends divertiſements.

It is a place that is capable of giving you ſo much pleaſure and delight, that you may beſtow not undeſervedly what coſt you pleaſe on it, by paving it with Marble, or immuring it with Stone or Rock-

Rock-work, either natural or artificially reſembling the Excellencies of Nature. The Roof may be made of the ſame ſupported with Pillars of Marble, and the Partitions made of Tables of the ſame.

The moſt famous of this kind that this Kingdom affords, is that *Wiltonian Grotto* near unto *Salisbury*, on which no coſt was ſpared to make it compleat, and wherein you may view, or might have lately ſo done, the beſt of Water-works, far excelling what *Rapinus* thus ſings of late *Richlieu*'s Palace in *France*.

Here variouſly diſpos'd the Fountains run,
Firſt headlong fall; then riſe where they begun,
Receive all forms, and move on every ſide,
With horrid noiſe, Chimæra *gaping wide,*
Out of her open mouth the water throws,
For from her Mouth a rapid Torrent flows,
From her wide Throat, as Waves in Circles ſpout,
A Serpent turning ſprinkles all the rout.

But they that cannot command the water to crown the pleaſures of their Gardens, yet are there few that cannot find ſome convenient place for this purpoſe, it being

being as neceſſary in them to avoid the liquefying Air, as in other places the unpleaſant Breezes.

CHAP. V.

Of Statues, Obelisks, Dyals, and other invegetative Ornaments.

IN all places where there is a Summer and a Winter, and where your Gardens of pleaſure are ſometimes clothed with their verdant Garments, and beſpangled with variety of Flowers, and at other times wholly diſmantled of all theſe; here to recompence the loſs of paſt pleaſures, and to buoy up their hopes of another Spring, many have placed in their Gardens, Statues, and Figures of ſeveral Animals, and great variety of other curious pieces of Workmanſhip, that their Walks might be pleaſant at any time in thoſe places of never dying pleaſures. 1. *Statues.*

Herein the ancient *Romans* were exceſſively prodigal, ſparing of no coſt to adorn their Avenues with curious Figures for their Winter diverſions, as well as with rare

rare Plants for their Summer delights. Which vanity (although one of the moſt excuſable) is deſcended on the *Italians*, whoſe Gardens are the mirrors of the world, as well for thoſe Ornaments, as for their excellency of the Plants that are propagated in them.

This mode of adorning Gardens with curious Workmanſhip is now become *Engliſh*, how many Statues made by excellent Art, are there to be ſeen in his Majeſties Gardens, and in the Gardens of divers of the Nobility of *England?* But what great pity is that in many places remote from Cities and great Towns, theſe Statues ſhould drive out of their view thoſe natural Beauties that ſo far exceed them?

Much more ornamental are Statues placed in Groves and Shades, and in or near your borders of the choiceſt Plants than on the naked ſurface of the Earth, which beget not that ſurpriſe in the Spectators, as the other.

Statues are commendable in the midſt of Fountains and green Squares in Groves, and at the end of obſcure Walks.

2. *Obelisks.* In the room of Statues in the midſt of your Green Squares, Obelisks, or ſingle Columns may not be improper, ſo that the Work-

Workmanſhip be accordingly. Neither can there be a more proper uſe for an Obelisk, than to ſupport a Globe with its Axis duely placed reſpecting both Poles, and its circumference on the Equinoctial Line, exactly divided into twenty four parts, and marked with twice twelve hours, that on it at a diſtance by the ſhadow only of the Globe on its ſelf, you may diſcern the hour of the day, and obſerve how the Day and Night, and Summer and Winter happen throughout the Univerſe.

Many Dials of various and curious Workmanſhip are made, and may be placed on Pedeſtals in the midſt of the Squares inſtead of Statues, which better become the ſhades.

3. *Dials.*

Dials of Glaſs, were it not for the caſualties they are ſubject unto, pre-excel any other for Beauty, eſpecially the Globe with its Axis through the midſt and duely elevated with ſmall Beads on it, placed at their due diſtances according to the lines of the Celeſtial Globe, painted on the ſuperficies of your orbicular Glaſs, which will not only give you the true hour of the day, but all other variations that a Dial can direct: But more of theſe things in another place.

Other ancient Ornaments of a Garden are Flower-pots, which painted white and placed on Pedeſtals, either on the ground in a ſtreight line on the edges of your Walks, or on your Walls, or at the corners of your Squares, are exceeding pleaſant.

They are uſually made of Potters Clay and burnt, which when full of Earth and frozen in the Winter are apt to break, unleſs you place another ordinary pot of Earth in the inſide of it wherein to plant your Flowers, you deſign to propagate in them.

But to prevent that caſualty of breaking, ſome are made of Lead which are much to be preferred.

5. Of an Aviary. One of the pleaſures that may be eſteemed belonging to a Garden is an Aviary, which muſt be near your houſe, that you may take ſome delight in it there as well as in your Garden, and may in all ſeaſons take care of its inhabitants: As for its bigneſs, manner of making and ordering, it is not proper in this place to be diſcourſed of, we being rather for an Aviary at large, that the whole Garden with its Groves and Avenues may be full of theſe pretty ſingers, that they may with their charm-

charming Notes, rouze up our dull Spirits that are too intent upon the cares of this world, and mind us of the Providence, the great God of the Universe hath over us, as well as these Creatures.

Lib. II.

Of the divers Trees, Flowers, and Plants, that beautifie and adorn a Garden.

CHAP. I.

Of Trees for Ornament and Shade.

HAving lightly paſſed over the Scite, Form, Security and dead Ornaments of your Garden; it is time now to give you an account of ſuch Vegetating Ornaments, that are proper and very well becoming the Gardens of the moſt curious. And becauſe the *Cypreſs* is the moſt beautiful and moſt celebrated Tree, I ſhall begin with Perennial Greens.

SECT.

SECT. I.

Of Winter Greens.

OF all the Trees that have been propagated in our *European* parts, none have yet merited that eſteem as the *Cypreſs* hath done, it being the moſt uniform, ſtreighteſt, and moſt ſlender of any other, preſerving its Verdure throughout the Year. 1. *Of the Cypreſs.*

Its natural Country is *Candia*, where (as *Pliny* writes) if a man plow the ground, and not ſowe it with ſome other thing, *Cypreſſes* will come up, and preſently ſhew above ground, from whence they have been ſpread into the moſt parts of *Europe*, ſo far as the extream cold will give them leave.

Their Seed ſeldom or never ripens here in *England*, but ſuch as you have from Foreign parts, you muſt ſowe about the beginning of *April*, which when come up and carefully watred and weeded, you may remove.

Theſe Trees may be either planted as Standards, or in Hedges, and clipped as other tonſil Hedges uſually are, if you intend

them for ſtandards, at about three or four years the middle ſhoot ought to be cut off near the top, and the whole tree kept cut into a Pyramidical form, and not bound as is the uſual cuſtom, only clip them not late in the Year, leſt the Froſt prove too fierce and kill your Trees.

For if they are not cloſe bound but clipt, and ſtand not in a cold moiſt Ground, they will endure the hardeſt Froſts and ſharpeſt Winds: For I have known many that ſtood in the loweſt part of the Garden killed with the extremity of cold, when others that ſtood on a *Terrace* more obvious to the cold Winds, eſcaped, and for no other reaſon as I could judge but their dry and healthy Soyl they grew in.

2. *Of the Laurel.* As the Cypreſs for its Beauty, ſo the Laurel for its Glory hath been in great eſteem with the Ancients, whoſe branches have crowned the Heads of Emperors in their Triumphs, and thoſe that were Victors in War or any Solemn Games: the *Laurel* branches are alſo Emblems of Peace, and of Pre-excellency in any ingenious Science or Enterprize, the ancient *Romans* attributed unto it an extraordinary property it had againſt the evil effects of Thunder and Lightning, and therefore

planted

planted it near unto their Houſes and Lodgings.

It is one of the beſt Ornamental Trees you can plant either for beauty or ſhade, it will cloath your moſt ſhady Walls and will endure the moſt ſcorching beams of the Sun, it will mount to twenty or thirty foot in height and be content to be humble and tonſil, no Weather will annoy it, it delights moſt in moiſt Ground;

In watry Vales, where pleaſant Fountains flow,
Their Splendent Leaves the Lovely Laurels ſhow.

And agrees beſt with a cool ſhady place which is equal to a watry.

They grow tall and bear great plenty of Berries from which the Trees are eaſily propagated, or from layers or ſlips, ſet in a cold moiſt place.

The *Laurus Tinus* is a Shrub yielding ſweet ſcented Tufts of white Bloſſoms in the Winter as well as the Summer, is eaſily propagated from ſuckers or layers, and deſerves a place amongſt the beſt of your perennial greens.

The *Bay-Tree* our old Engliſh Plant is

a fine odoriferous Tree, but worn out of that great eſteem that formerly was had of it, by the more beautiful and hardy Laurel.

3. *Of the Phylirea.* Few Greens exceed in beauty either in Branch or Leaf the *Phylirea*, which ſpreads ſo fairly and near the ground, and riſes to that height, and ſo eaſily managed with the ſhears, that it is eſteemed one of the moſt pleaſant Plants that nature yields, it is very hardy and endures our generally moſt ſevere Winters, having never known them nipp'd with fierce cold but once (*Anno* 1663.) and then the Branches being for the moſt part cut off, the Tree reaſſumed its former Luſtre.

It is raiſed of Seeds, and may be increaſed by Layers and ſometimes by Slips, it will not eaſily bear a remove till the coldeſt ſeaſons are over.

There are two ſorts of it, the one with a ſmaller and more edged Leaf than the other, which yields great plenty of bloſſoms in the Winter which laſt until the Spring, but the barren Tree is the more beautiful.

Theſe Trees may be cut into any form high or low, in Hedges or in ſingle Trees, and will cover a Seat or Bower in a ſhort time,

time, and more neatly than any Tree whatſoever.

A Species of the ſame is the *Maternus*, a hardy pleaſant Shrub, not aſpiring to that height as the Phylirea, but is apt for Hedges, and eaſily managed. 4. *Of the Maternus.*

Moſt of the ancient Gardens of *England* were formerly beautified with this never dying Box, becauſe you might have reduced it to any form or ſhape high or low, but by reaſon of the ill Savour emitted from it, and by its ſpreading Roots continuing long in a place ſterilizing the confining Earth, it is now baniſhed our Gardens. 5. *Of the Box-tree.*

Our Modern Planters have brought into our Gardens to adorn our Walks, the *Eugh*-Tree, which growing tall and ſtout againſt all Weathers, and its ſmall twigs ſticking cloſe to the Trunk, clothing it always green, no Sun nor ſhade offending it, is one of the moſt ornamental Trees you can deſire. 6. *Of the Eugh-tree.*

I ſhould undervalue the judgment and opinion of our beſt Arboriſt Mr. *Evelin*, if I ſhould not numerate the *Holly* amongſt the moſt ſelect of our Hortenſe perennial Greens, which he eſteems to be the moſt incomparable for *Uſe*, *Defence*, *Sight* and *Orna-* 7. *Of the Holly.*

Ornament, I need ſay no more of it, ſeeing his learned Pen hath ſufficiently emblazoned its fame.

8. *Of the Firr.* The Firr-Tree is rather for the Woods, than for the Garden, yet by reaſon of the ſlender and aſpiring trunk of the ſtreight Firr, and the facil keeping and preſerving its Branches in a compleat Circular order, it doth very well become a Garden, planted at the Corners of your ſquares, or in direct lines at a little diſtance from your Walks.

Having one of theſe Trees whoſe top was periſhed, I clipt it with my ſheers, and reduced it to a fine Conick ſhape; and find it as eaſie to be managed with the ſheers, as any other Plant.

They are eaſily propagated from the ſeed taken out of the cloggs and ſown in March, and very well endure a remove, all other ſorts of Firr and Pines, beſides the ſtreight ſmall leaved Firr are to be excluded your Garden of pleaſure, being not capable of being reduced to a compleat form.

9. *Of the Cedar.* For the rarity of it more than for its beauty may the famous Cedar find a place in your Garden, the name whereof is ſufficient to revive thoſe ſtupendious relations of

of the Magnitude, Durableneſs, Excellency and Virtues of that moſt ſacred of Trees.

Not unbecoming your Garden, is the *Ilex* or ever Green Oak which is hardy, though ſlow in growing, and propagated from its Seed or by layers. 10. *Of the Ilex.*

The *greater Tree Stone Crop* is a beautiful green not common but raiſed from layers and preſerved in ſome Gardens. 11. *Of Tree Stone crop.*

The *Strawberry Tree* as it is ſo termed from the red Berries it uſually bears, although difficultly raiſed from Seeds or Layers, and with the like difficulty removed whilſt young, yet thrives very well in the warm part of your Garden, adding much beauty to it by its green leaves all the Winter, and its Berries in the Autumn. 12. *Of the Arbutus.*

One of the moſt Vulgar yet moſt uſeful and neceſſary Greens is the *Roſemary*, a Plant natural to many places in *Spain*, but here nouriſhed in the warmeſt places of our Kitchin Gardens; I have obſerved in ſome Country Gardens a dwarf kind of *Roſemary* kept ſheered that hath been exceeding comely, the Plant is eaſily managed, did not the moſt ſevere colds deſtroy it, but that dwarf kind is the more hardy. 13. *Of Roſemary.*

The large double *Roſemary* is the more Orna-

Ornamental to a Garden; but that with a double bloſſom the more rare.

14 *Of Pyracantha.* The *Pyracantha* or ever green Hawthorn is a compleat Tree for a Fence, its Thorns being ſtrong and ſharp, it is alſo very beautiful when its Berries are ripe, which are of a Coralline red, its leaves ever green, but not very thick.

15. *Of Arbor vitæ.* The *Arbor vitæ*, ſo called from its ever green and hardy leaf, may be planted to make up your number of Greens, for its rarity, but not for its beauty, any more than the *Savin*, which is much like it.

16. *Of Celaſtrus.* The *Celaſtrus* or Staff-tree, bearing a few green leaves over the Winter, and as Mr. *Ren* adviſeth, is fit to be mixed with *Pyracantha* for the making of the ever green Hedg.

Theſe ever green Plants have in them a ſtrong reſinacious Juice, that fortifies them againſt the cold, and is the cauſe of the continuing of the leaf ſo long on the Stalk, as may be obſerved in the *Firr* and *Pine*, what an abundance of that Terebintine Sap do they contain, enduring the moſt fierce colds the Northern Climate yields, the *Cypreſs* and the *Roſemary* both yield a very hot and reſiny ſap.

The *Holly* affords us out of its bark, that glutinous

glutinous lime that enſnares the heedleſs Fowl, which diffuſed naturally into its leaves, enables them againſt all the inconveniencies of Winter and Cold. The *Phylirea* hath a very ſtrong Sap that preſerves it, as appears by its Bloſſoms affording ſo much matter for the *Bees* to feed on in the Months of *January* and *February*. All the other Winter Greens have more or leſs of the like reſinatious and glutinous Sap or Juice, that is not ſo eaſily preyed upon by extreme colds.

SECT. II.

Of Variegated or Gilded-leafed Plants.

THeſe Perennial Greens are very Ornamental, planted in their proper places of your Garden and Avenues, by reaſon of their perpetual Verdure, that the Winter that ſeems elſewhere moſt barren, here amongſt theſe Greens appears like a perpetual Spring, yet muſt theſe give place to the moſt beautiful of Trees and Shrubs of the ſame kinds (as to their durableneſs) by reaſon of their variegations, but much excelling them.

For

For what can be more pleaſant than to have Groves or Walks (when the Flowers that are but for a day are retired) apparrelled with Gilded party-colour Garments, ſome with yellow and green, others with white and green, emulating the two royal Metals that by the Gilders hand adorn the Palaces of Princes. The moſt excellent of all which gilded Plants is the *Holly*, whoſe Bark as well as Leaf is variegated with a bright yellow, the more yellow the Leaf is the more beautiful is the Plant; if Vulgar *Green Holly* be ſo glorious and refreſhing an Object, as Mr. *Evelin* hath Characterized it to be, then certainly the ſame with a due mixture of a bright yellow muſt pre-excel. In fine, whoſoever hath once ſeen this Tree will not think any *Perennial* green equal to it, for it is like the true ſcarlet dy, which preſent debaſeth all other Colours.

1. *Gilded Holly.*

2. *Gilded Laurel.*

The Gilded Laurel is a very pleaſant Tree although inferiour to the *Holly*, for want of that Oriental Verdure and more polite Leaf, but this Plant is more rare to be obtained than the Gilded *Holly*.

3. *Gilded Phylirea and Alaternus.*

Of *Phylirea* alſo there is a ſort that is much variegated with white and is very pleaſant, as the like there is of *Alaternus*, which

which is not altogether ſo hardy as that of the *Phylirea*, yet both moſt worthy of your care.

The Leaves of *Box* are on ſome Trees Gilded with an edge round each of them with yellow, but theſe Trees do not annually produce all their Leaves Gilded: ſometimes they are green, and ſometimes Gilded, yet are theſe Trees not to be wanting in your *Golden Grove*. 4. *Gilded Box.*

There is beſides the *Roſemary* that is Gilded with yellow, a ſort of it variegated with white, very delightful to the Eye and not ſo common as the yellow, but both theſe are to be preſerved under warm Walls or other Fences to ſecure them from the too ſevere Winds. 5. *Gilded Roſemary.*

The *Periwinckle* is a low creeping Plant, ſome bearing white, ſome blew Flowers, growing wild in many places, and ſcarce worthy of a place in a Garden, except for the covering the Ground in the Shades of your Groves and Avenues, with its ever green and running Branches, but the *Gilded Periwinckle* whoſe Leaves are exceeding well variegated, much reſembling the *Gilded Phylirea* or *Alaternus*, is as compleat an Ornament for clothing the Earth of your *Golden Grove*, as any of the Gilded Trees 6. *Gilded Periwinckle.*

Trees are for the more lofty part of it.

7. *Gilded Lilly.* And although your Gilded Trees are moſt becoming in a Grove or Walk, and the Periwinckle be proper for a humble Ornament, yet ſome Plants of a middle rank or degree may not unbecome ſo ſplendid an Object; of which none can be more ſuitable than the Lilly whoſe Verdant Shining, Pale-green Leaves are curiouſly painted by Nature's Pencil with yellow, appearing at a great diſtance as well as near very beautiful; theſe Leaves from the Ground to the top of the Stalk, from the Spring to the Autumn, being much more comely than the Bloſſom, which is the fair white Lilly.

8. *Gilded Night-ſhade and Mugwort.* It is known to all Naturaliſts that the beſt Garden ground is moſt prone to weeds which are its Spontaneous productions, and ſeeing that Weeds are expected in our Grove as well as in our Garden, it were better that it were in part ſupplied for want of Gilded leaved flowers with *Gilded Weeds*, whereof the *Night-ſhade*, otherwiſe a noiſome Weed, but with its variegated Leaves, and here and there thinly diſperſed, with *Gilded Mugwort*, another Weed of the like nature, would make a good mixture with the other richer

richer dyes, like the ordinary Colours in a Picture which ſerve to illuſtrate the more excellent.

Some other ſorts of Gilded Plants there may probably be; but theſe are all that I have hitherto obſerved. As theſe have been caſually met withal, and from them others have been raiſed, ſo by the ſame reaſon may other ſorts be diſcovered that yet have not been obſerved.

For travelling through ſome part of *Glamorganſhire*, and diſcourſing of theſe *Variegated Greens*, one of that Country aſſured me that in that County was a very large *Holly* with all its Leaves curiouſly Gilded, growing wild in a Wood, which was not unlikely, for from the Woods they firſt came, but that which was moſt ſtrange was that the ſame Tree ſhould be neglected, and not a great number of Plants raiſed from it.

The reaſons why ſuch variety of colours ſhould appear in the Leaves of Trees and Plants is not to be diſcovered, ſeeing that we may obſerve the like in the various colours of ſome ſorts of Beaſts and Birds, and they as well as theſe are alſo apt to degenerate. And as theſe curious Plants are by accident, or ſome ſecret

inclination of nature diſcovered unto us, ſo they are the more to be valued, and on them may we the better beſtow our delight and admiration.

9. *The Embroidered Elder.*

Thus will we conclude this Section, of monſtrous curioſities in the Leaves of Plants, with that of the *Elder-tree.* It happened that about two years ſince, (being *Anno* 1674.) a Gardener near *London*, by accident diſcovered in a hedge an *Elder-tree*, whoſe Leaves ſeem'd to be embroidered, by the ſwelling of the veins that ſpread themſelves throughout the Leaf, and appearing of a different colour from the reſt of it, they being of a curious texture, made them appear to the Eye moſt beautiful and rare, which Tree he tranſplanted into his Garden, as no ſmall curioſity.

SECT. III.

Of other Trees propagated for their Beauty and Shade.

1. *Of the Platanus.*

BEſides theſe Perennial Greens and other rarities in Nature that ſeem to take up ſo large a room in your Plantation,

tion, yet are there other Trees that in the Spring and throughout the Summer, do very much adorn your *Groves* and *Avenues*, and cool and refreſh thoſe that delight to walk in them in the heat of thoſe ſeaſons. The moſt principal of which is the *Platanus*, a Tree ſo much admired by the Ancient *Romans*, that they preferred them before any of their own Native productions, and that for their Shades only, it ſo abſolutely excluding the Beams of the Sun in the Summer, and admitting them in the Winter. The Branches are but thin and ſlender, the Leaves broad and of colour pleaſant, the Tree groweth large. *Pliny* records that in his time, a *Plane-tree* was of that bigneſs that being hollow within, eighteen perſons uſually ſate on Benches in it, and ſupp'd with *Licinius Mutianus* its owner. This Tree delights in Water: for the Tree that grew to that bigneſs, had a cool Fountain adjoyning to it, and thoſe that had not ſo convenient a place for it, yet it ſeems by *Pliny*, out of their extraordinary affection to it, irrigated it with better Liquor. He alſo tells you of another that the Emperor *Caligula* had in his Ville, in which was a capacious Room, that fifteen perſons might

ſit at a repaſt, and yet ſpace enough for their Servitors to wait on them. In truth, the World doth not yield a more beautiful Tree for ſhade than the *Plane*. It grows and proſpers well if planted in a moiſt ground, or be conſtantly watred whilſt it is young, and will ſoon arrive to your deſired bigneſs.

2. *The Tilia.*

Unto the *Platanus*,

High ſhooting Linden, *next exacts your care,*
With Grateful Shades, to thoſe who take the Air,

This Tree ſeems to contend with the *Platanus* for beauty and ſhade, only its Leaves are not ſo fair, but for its conick or pyramidical Form it exceeds moſt Trees, and for its ſweet ſcent, wherewith it perfumes the Air in the Months of *July* and *Auguſt*, there is no Tree comparable to it of that magnitude. The Bees will teſtifie it, who in innumerable multitudes gather on the rows of theſe Trees when they are in bloſſom. They are reducible almoſt to any form, if planted at a diſtance they ſpread, if near they aſpire. They delight in moiſt and good ground, and are very quick

quick of growth. The many large Avenues planted of them in moſt places, ſufficiently demonſtrate their beauty, ſhade, and flavour.

The *Horſe-Cheſnut* for the beauty of its Leaves in the Spring, and the compleat form of its Bole, is not unworthy of a place amongſt the beſt of Trees for Shade, and Ornament. This Tree is very lately made Engliſh, being brought in its Seed or Nuts from *Conſtantinople*, it proſpers very well here in good light Mould, its buds all the Winter and until it ſprings, are covered with a ſhining glutinous matter or Gum, and about the beginning of *May*, it uſually makes its whole Years ſhoot in eight or ten days, and then dilates its Leaves, more pleaſant than which ſcarce any Tree yields. 3. *The Caſtanea Equina.*

Chriſts Thorn, ſo named, for that it is ſaid to be the ſame wherewith our Saviour was Crown'd at *Jeruſalem*, near which is the natural place for its growth. This Tree may be placed in your Garden as a rarity, as may that which is yet a greater wonder called 4. *Paliurus.*

The *Glaſtenbury thorn*, being in appearance a vulgar white Thorn, yet budding and yielding plentifully its bloſſoms in *December*. 5. *The Glaſtenbury Thorn.*

cember. I have for ſeveral years obſerv'd it in Bloſſom at *Chriſtmas*, ſometimes it bloſſoms before if the Weather be mild, but if the cold be very ſevere it will retard it: thoſe Bloſſoms are ſucceeded by Berries and Leaves, although Winter, as the ordinary white Thorns are in the Summer. They that read the divinity of the Monaſtery of *Glaſtenbury*, may the more eaſily believe the report of this Tree, that by its bloſſoming on the twenty fifth day of *December*, it doth not only indicate unto us the very day of our Saviours Nativity, but condemns our ſloth and contumacy in not rejoycing with it at ſo glorious a diſpenſation.

This Tree flouriſhed many Years in *Wilton* Garden near *Salisbury*, and I ſuppoſe is there yet, but is not altogether ſo exact to a day as its original from whence it came was reported to be, it's probable the faith of our Anceſtors might contribute much towards its certainty of time. For imagination doth operate on inanimate things, as ſome have obſerved.

Thus have you a brief account of the moſt delightful, pleaſant and ornamental Trees wherewith to beautifie your *Garden*, *Avenues* and *Groves*, which are ſhady and

and cool receſſes from the noiſe and cares of the world, and the hot gleams of the Sun, and are an artificial *Epitome* of the larger *Woods*, *Forreſts*, and *Groves*, ſo much celebrated by the Ancients, who attributed unto them moſt divine honour.

Here you may in a ſmall Room and at an eaſie expence, reap the advantage of thoſe more ample poſſeſſions.

Thus bleſt is he, who tir'd with his affairs,
Far from all noiſe, all vain applauſe, prepares
To go, and underneath ſome ſilent Shade,
Which neither cares nor anxious thoughts invade,
Does for a while himſelf alone poſſeſs,
Changing the Town for Rural happineſs,
He, if he pleaſe, into the Groves *may ſtray,*
Liſten to th' Birds, which ſing at break of day. Rapinus.

SECT. IV.

Of the Propagating and Planting the ſaid Trees.

THe ſeveral Trees before mentioned, are variouſly propagated and removed at various times, being many of them *Exoticks*: And therefore the nature of the Climate is to be conſidered.

Such of them that are natural to this, or a more Northerly Climate, may be removed at any time of the Winter, but the nearer the Spring the better, and are generally raiſed of ſeed, as the *Holly*, the *Eugh*, the *Firr*, the *Pyracantha*, and the *Glaſtenbury-thorn*. The *Lawrel*, the *Bay*, the *Tilia*, the *Caſtanea Equina*, although raiſed by layers as well as by ſeeds, yet will endure a Winter removal.

The *Cypreſs*, the *Pine*, the *Cedar*, and the *Celaſtrus* are more tender, and although they are raiſed of ſeed only, yet ought they to be removed in the warmth of the Spring about *March* or *April*. As alſo the Plants, Slips, or Layers of the *Phylirea*, *Alaternus*, *Ilex*, *Arbutus* and *Roſemary*, whether from ſeed or Layers, becauſe they are brought hither from a more Southerly Country.

The *Slips* or *Layers* of all your *Gilded* Plants, deſerve your care in removing them at the Spring, or ſuch times as the plain Trees of the ſame kind ought to be.

The *Box*, the *Greater Tree ſtone-crop*, *Arbor Vitæ*, *Savin*, *Platanus*, and the *Palinrus*, are increaſed by Slips and Layers only, which muſt be laid or ſlipped in the

the Spring, and (except the *Paliurus*) may be removed all the Winter, the *Paliurus* only in the Spring.

It is obſerved that it is the beſt way of planting the *Box*, to ſtrip away the Leaves from the Slip, and not to wind the Stem, but to ſet it whole without winding.

It is alſo ſaid, that every ſlip of a *Bay-tree* will grow if ſet in *March*, the great Leaves being ſtript off, but they muſt be ſhaded and ſometimes watred if need require, elſe they will not ſo eaſily take root.

The Gilded Trees or Plants muſt be increaſed by Layers, Slips, or Graffs, for it is obſerved that by raiſing of them from Seed they degenerate.

CHAP. II.

Of Flower-trees.

AFter your *Garden*, *Avenues*, and *Groves*, are reduced into ſuch form as you deſire, and thoſe adorn'd ſo far as neceſſarily they ought to be, with thoſe graceful and immortal *Greens* and other pleaſant Trees yielding ſhade and delight,

light, it then behoves you to furniſh thoſe intervals that remain, and the borders of your Walks with Flowers, the wonders of Nature for the richneſs and variety of their Colours, Scents, Forms, and Seaſons. Amongſt all which thoſe Shrubs or Trees yielding ſo great a variety of thoſe objects are moſt to be prized, and of theſe is the *Roſe* to be preferred.

SECT. I.

Of the various kinds of Roſes.

THere is no Flower-bearing Tree that yields ſo great variety, nor any Bloſſoms ſo beautiful as the Roſe, nor do they only adorn but perfume your Gardens.

Now I perceive from whence the Odours flow,
While on the Roſes kinder Zephyrs blow.
Out of the Prickly Stalk the Purple-Flower
Springs, and commands the Vulgar to adore,
The Garden-Queen doth now her ſelf diſplay,
Soiling the Luſtre of the riſing Day.

Be-

Between the Tulip and the Gillyflower, they are the greateſt ornament to a Garden, whereof the *Yellow Province Roſe* is the moſt beautiful, where it brings forth fair and kindly Flowers, which hath been obtained by budding a ſingle *Yellow Roſe* on the ſtock of a flouriſhing *Francford Roſe* near the ground; when that ſingle yellow is well grown in that branch, inoculate your double yellow Roſe, then cut off all ſuckers and ſhoots from the firſt and ſecond, leaving only your laſt, which muſt be pruned very near, leaving but few buds, which will have the more nouriſhment, and yield the fairer and more entire bloſſom. 1. *Of yellow Roſes.*

This Tree or a layer from a Roſe of the ſame kind delights moſt and blows faireſt in a cold, moiſt, or ſhady place, and not againſt a hot Wall.

The ſingle yellow Roſe is ſcarce worth the planting except for the uſe aforeſaid.

The neareſt in Colour to the former is the *Auſtrian Roſe*, being but ſingle, yet in much eſteem for its Bloſſom, whoſe Leaves are of a ſcarlet colour within, and on the outſide of a pale yellow. 2. *The Auſtrian Roſe.*

The ſweeteſt and moſt uſeful of *Roſes* is the *Damask*, which in my *Lord Bacons* time was by him obſerved not to have been 3. *The Damask Roſe.*

been in *England* above one hundred years; of these Damask kinds there is one that beareth Blossoms with the first, and so continues with new Blossoms until the Frosts prevent it, and is therefore called the

4. *The Monthly Rose.* *Monthly Rose*, and is not inferior in smell to the Damask, and deserves a place amongst your most select Plants; this seems to be the *Rose* that *Pliny* mentions to be growing in *Spain*, that blow and flower all the Winter.

5. *The Damask Province Rose.* The *Damask Province Rose* differs from the ordinary Damask, in that only it is very double and fair but not so sweet.

6. *The York and Lancaster Rose.* The *Damask Rose* with some of its Leaves marked with a faint blush is usually termed the *York and Lancaster Rose.* I suppose because it was the first variegated Rose that was here known after the Uniting those two *Houses* or *Roses.*

7 *Mr. Harts Rose.* But the best of *Damask Roses* and inferiour to none other is the *Damask* compleatly striped, usually called Mr. *Harts* Rose; it is a very plentiful bearer, the Flowers exceeding sweet and very beautiful, and that Garden is defective that is without it.

8. *The Belgick Rose.* There are two Roses bear the name of *Belgick Roses*, the one of a blush Colour, bearing many Flowers at the end of a Branch,

Branch, and thoſe very ſweet; and this Tree is eſteemed the greateſt Bearer of all Roſes. The other is of a red colour, very double and beautiful, and in good eſteem.

The ordinary *Red Roſe* is generally known, the *Hungarian Roſe* is little better, and the *Red Province* is eſteemed only for its fairneſs, as is the *Dwarf Red Roſe* for its humility. 9. *The Red Roſe.*

The *Roſe* that moſt illuſtrates the whole kind is the *Roſa-mundi*, being Red elegantly ſtrip'd with White, two ſo divers colours appearing plainly at a diſtance; its ſcent is weak, but that defect is ſupplied by its beauty. 10. *Roſa Mundi.*

The *Marbled Roſe* is a very fair Red Roſe, fully and curiouſly marked or dappled with dark colours, that it very much reſembles *Marble*, from whence it hath its name, and deſerves a place amongſt the beſt Roſes. 11. *The Marbled Roſe.*

The *Velvet Roſe* is the darkeſt of all Roſes, and its Leaf much reſembling Velvet, it's not very double but ſome more than others. This Tree and the *Roſa mundi*, are very great Encreaſers. 12. *The Velvet Roſe.*

The *Francford Roſe* yieldeth large ſhoots, and is fit for the budding of the *Yellow Roſe* 13. *The Francford Roſe.*

Roſe on it, the Flowers not much to be commended, nor is that of the *Roſe without Thorns*, or the *Virgin Roſe*.

14. *The Cinamon Roſe.* The *Cinamon Roſe* is in eſteem only for its ſweet ſcent and early blowing, being the firſt of Roſes.

15. *The White Roſe.* 16. *Roſa Canina.* The vulgar *white* and *bluſh Roſes* are known to moſt, the *Roſa Canina* ſo call'd from its whiteneſs like unto a Dogs tooth, yet not ſo perfectly white as the Vulgar, but much more double, and for that reaſon it is eſteemed.

17. *Musk Roſes.* The double *Musk Roſes* flower later than any other Roſes except the *Monthly Roſe*: Their ſcent gives them their name, and deſerve a place in your Garden, but the ſingle called the *Spaniſh Musk Roſe*, is not of ſuch value.

18. *Ever green Roſe.* One ſort of the Musk Roſes keepeth on its green Leaves all the Winter, which property hath impoſed its name; its Flowers are ſingle, yet not to be ſlighted by the curious.

19. *Double Eglantine.* The vulgar ſweet Briar for its excellent odour in the Spring, deſerves a place near your Houſe or places of repoſe, yet not ſo much as that which bears a double bloſſom, for which it is preferr'd to it, and is one of the beſt of odoriferous Plants.

The

The *Gelder Roſe* or *Gelderland Roſe*, ſuppoſed thence to have its name, or rather *Elder Roſe*, from the likeneſs of its branches to *Elder*, having the name of a *Roſe* I place it here, although not in any thing reſembling it. It is a hardy Tree, and yields great plenty of Snow-white bunches of Bloſſoms, and very well becomes a Garden or a Chimney by a due mixture. 20. *The Gelder Roſe.*

SECT. II.

Of Ordering of Roſe Trees.

ROſes have been in ſo great eſteem from all antiquity, that the curious have been very diligent in their propagation, amendment and diſcovery, ſeveral having been in ſeveral Ages produced that were not known to the Times preceding, and various ways have been invented and found out for their propagation, improvement and preſervation.

The more excellent ſorts of them have ſucceeded very well by Grafting on the Stock of the common ſweet Briar.

And by inoculation may they be increaſed on the Stocks of the common Roſe Trees;

Trees; the time for this work is about Midſummer.

And when you have thus obtained one Tree of a ſort of the more rare, you may multiply them by laying them, which may be done without the help of Boxes or Pots, the Branches being pliable and the Tree it ſelf humble, only by bending down the Tree and laying the Branches in the Earth, and covering the middle of them, being firſt prickt with an Awl about ſome joynt, that is to be under the Earth. This may be done in the Spring, ſometimes watring the Layers in dry Weather, then in the Autumn moſt of the Spriggs will have taken root, and are in their prime to be removed; theſe will never degenerate, and all Cions proceeding from them will be of the ſame.

To make *Roſes* bear early, they muſt be planted in a very warm place, or on a declining Bank towards the Sun, and irrigated with Water, enriched with the hotteſt dungs or ſhavings of Horn and Lime ſteeped in Water: ſome ſay warm Water will accelerate their blowing.

To make them bear late, the way approved of by ſeveral upon experience, is at the time when they begin to bud, to clip

or

or ſhear off all the Buds, and when other Roſes have done blowing, theſe will ſhoot forth new Buds; thus may you annually continue this pleaſant Flower longer than naturally it would, by cutting ſome of your Trees that they may ſucceed the other.

Some ſay, if you cut the tops of the Trees in the firſt of the encreaſe of the Moon after the Bloſſoms are faded, that another ſhew of Bloſſoms will appear about *Michaelmas*, but the other is the more certain way.

To have *Roſes* until *Chriſtmas*, you may plant the monthly Roſe in ſome Niech of your South-wall, and you will have Roſe buds freſh and fair in *October*, and in mild Winters in *November*, which by ſhutters artificially made may be defended from the cold (ſometimes admitting the Sun) until *Chriſtmas*, you may add artificial warmth to them if you pleaſe, I have had fair *Roſe buds* in *November* with younger by them, which might have been thus preſerved.

Musk Roſes are to be planted againſt a high Wall or ſide of ſome Building, and not check'd in their growth upwards, leſt you hinder their bearing.

SECT. III.

Of divers other Flower-bearing Trees.

BEſides the great variety of colours and delightful ſcent that the Roſes have for the greateſt part of the Summer yielded you, yet there are ſeveral other ſweet and pleaſant Objects Nature hath furniſhed you withal, if you will lend your aſſiſtance to convey them into your *Garden*, of whom none are more gratefully odoriferous than the *Jaſmins*.

Nor knows he well to make his Garden ſhine,
With all delights, who fragrant Jaſſemine,
Neglects to cheriſh. —— Rapinus

1. *Yellow Jaſſemine.* 2. *White Jaſſemine.*

The moſt common is the *Yellow Jaſſemine*, but the white far exceeds it in beauty, and yielding one of the moſt odoriferous Flowers in nature, as the perfumes made thereof witneſs. In the Autumnal Seaſon theſe laſt furniſh you with many Bloſſoms for a long time until the Froſts prevent them, both theſe require the help of a Wall or Palliſade, their Branches being but ſlender and weak, yet enduring the moſt ſevere Colds. The

The *Indian Jaſſemine* or the *Mexican Tlilxochitle* is a Plant requires a tall Wall to aſpire againſt: at every Joynt it hath ſmall claws or tendrils, inſinuating into Brick, Wood, or any other penetrable ſubſtance, and requires but ſmall aſſiſtance to prune it, it affords a beautiful Scarlet Bloſſom, in *America* being one of the Ingredients to the famous Drink *Chocolate.* 3. *Indian Jaſſemine.*

The two former Jaſſemines are great Encreaſers, and all of them may be increaſed by Layers.

Not inferiour to the beſt of the former is the *Perſian Jaſſemine*, for that it is a beautiful Shrub, yielding in the prime of the Summer moſt pleaſant and well ſcented Bloſſoms, which welcome you to the choiceſt Flowers, Trees will yield. As the *Perſian Nuts* and *Iris*, ſo the *Perſian Jaſſemins* precede in Bloſſom all others in reſpect of time, and therefore are the more valued, they are eaſily increaſed by Layers. 4. *The Perſian Jaſſemine.*

Not much unlike in Bloſſom to the laſt is the *Syringa Pipe Tree* or *Lilac*, but the white more rare, being but of humble growth, the Bark of a whitiſh colour, the Leaves of a very pleaſant pale colour, affording you Branches of fine ſcented white Flowers in *April* and *May*, and is a Tree 5. *The Lilack.*

yielding ſuckers plentifully, which very well merit room in your choiceſt Avenues.

6. Balauſtium. The *double bloſſomed Pomegranate Tree*, is eſteemed the rareſt of all flowring Trees, yielding ſo pleaſant a Branch, and a much more luſtrious Bloſſom.

Pomegranates next their Glory vindicate,
Their Boughs in Gardens pleaſing Charms create.
Nothing their flaming Purple can exceed,
From the green Leaf the golden Flowers proceed.

This Tree deſerves the choiceſt place in your Garden and under the warmeſt Wall, being tender whilſt young, but after very hardy, the Flowers are double, fair and beautiful, exceeding all others, born by Trees: they are eaſily propagated by Layers.

This delicate Plant deſerves a little of your care and aſſiſtance, in ſeparating from it the many Suckers that uſually proceed from it, and keep it to a few or but one Branch, and ſometimes enrich the Ground with well conſumed Hog's dung; for it is the plenty of nouriſhment makes them apt to bloſſom, and too many

Branches

Branches or Suckers rob them of it, you need not houſe them, but if you doubt your Wall ſtands too open to the cold Winds which only can hurt them, it is but taking a Mat or placing a Skreen before them in the Winter to defend them from it.

The dwarf Almond is a very humble Shrub, bearing in *April* many fine Peach-coloured Bloſſoms, and is a very pleaſant Plant, and yields plenty of Cions, it deſerves a place in your Garden and needs not to be houſed, it enduring all Weathers. 7. *Dwarf Almonds.*

The *Mezerion* from whence ſoever tranſported is one of the moſt hardy Plants in nature, ſending forth its pleaſant, beautiful and odoriferous Plants in the coldeſt ſeaſons of this Northern Climate, uſually in *January*, and continues in bloſſom in *February* and *March*, after them Leaves, and then its Coralline berries, by whom it is increaſed. The Shrub is of a very ſoft conſiſtence, and although cold, will not kill it, yet is it very tender in the choice of its Ground, I ſuppoſe a light Ground or a very moiſt are not proper for it. 8. *Mezerion.*

There are three ſorts of them, the one of a Peach colour, another more red being not ſo common, the other and the moſt rare is the White.

9. *The Sena Tree.* There are two ſorts of *Sena Trees*, the *Great Baſtard Sena* and the *Scorpion Sena*, both of them yielding a pleaſant Leaf and fine yellow Bloſſom, not unbecoming a good Floriſt's Garden, they are ſlender and require the help of a Wall, endure all Weathers, are tonſile and therefore reducible into any order, and are increaſed by Seeds, Layers or Suckers.

10. *Spirea Frutex.* The Shrub *Spirea* is a ſmall Tree bearing ſmall Peach-coloured bloſſoms about the Month of *Auguſt*, it's a hardy Tree and is increaſed by Layers.

11. *Arbor Judæ.* The *Judas Tree* yields a fine purpliſh bright red bloſſom in the Spring, and is increaſed by Suckers and Layers.

12. *Laburnum.* The *Bean Trefoyl*, ſo termed from the likeneſs of its Leaves to the herb Trefoyl, and its Pods to Beans, it affords many fine yellow bloſſoms, and is a very pleaſant though common Tree, it is increaſed by ſeeds, cuttings, and layers, and requires ſome artificial helps to ſupport its weak Branches, there are three kinds of theſe, the ſmalleſt is called *Cytiſus ſecundus Cluſii.*

Not

Not much unlike to the yellow Jaſſemine is the *Spaniſh Broom*, only its flowers are like our ordinary broom as are the Cods, only larger: it flowers in *May*, and is increaſed by Seeds and Suckers. 13. *Spaniſh Broom.*

The *double Virgins Bower* is a climbing Tree, fit to cover ſome place of repoſe, or to be ſupported by props for that purpoſe, it bears many dark blew double Flowers in *July*, *Auguſt*, and until the cold prevents them: you may cut off moſt of the ſmalleſt branches in the Winter, it ſhoots early and ſpreads very much in a Summer, it is eaſily increaſed by Layers. 14. *Virgins Bower.*

There are of them ſingle both purple and red, but this double is to be preferred.

The *Honey-ſuckle*, eſpecially either of the more generous kinds of it, is a Plant which though vulgar yet deſerves our pains in propagating it. The double and the red are the moſt choice, and are eaſily propagated by Layers. 15. *Woodbinds.*

Periploca is a Plant that twiſts it ſelf about a Pole as doth the Hop, it lives over the Winter and yearly puts forth ſmall blew bloſſoms, is increaſed by Layers, and entertained in Gardens only for variety ſake and not for its beauty. 16. *Periploca.*

17. *Athea Fruticosa.* Of the *Shrub Mallow* there are two sorts, the *purple* and the *white*, they endure the Winter, are usually planted Standards, bring forth their Flowers in *August* and *September* until the wet or cold prevent them, the Tree is increased by Layers. The blossoms resemble the blossoms of a Mallow, whence it hath its name, and is a fair Autumnal ornament to your Garden, for it buds and blows very late in the Year.

18. *Hypericum Frutex.* *Hypericum Frutex* is a Shrub yielding abundance of small slender shoots, which in *May* are very thick set with small white blossoms, that the Tree seems to be all hoary with frost or covered with snow: it is increased by Suckers and endures all weathers, and very well becomes the choicest Gardens.

19. *Double flower'd Peach Tree.* There is a sort of *Peach Tree* yielding double Flowers fair and beautiful, deserves a place under your Wall.

20. *Double flower'd Cherry.* The like there is of *Cherries*, a sort that bears a fair white blossom very double, but yielding no fruit as doth that of the *Peach*, yet a welcome Plant to a good Florist.

There are Apple Trees and Pear Trees that yield double Flowers, but they are not so much regarded. Thus

Thus by propagating and preſerving ſuch *Flower-bearing Trees* and *Shrubs*, may you have your Garden and Groves replete with great variety of curious Flowers from the end of *January*, when the hardy *Mezerion* expoſes its ſeveral coloured ſweet ſcented bloſſoms to your view, until the cruel froſts and winds check the *Monthly Roſe*, *Athea fruticoſa*, *Virgins Bower*, and *White Jaſſemine*; and ſo throughout the whole Summer between thoſe two extreams, and that without the trouble of removing, altering, ſhading, skreening from cold or other inconveniences, which moſt other Flowers are ſubject unto, and are therefore much rather to be preferred; yet if you are willing to undergo the little trouble of defending the *Monthly Roſe*, or *White Jaſſemine*, you may have bloſſoms from them later, and *Roſes* even until *Chriſtmas*.

CHAP.

CHAP. III.

Of Bulbous-rooted Flowers.

NExt unto the *Flower-bearing Trees* are thoſe of Bulbous roots to be preferred, for their eaſie propagation and management, and durableneſs in all ſeaſons hot and cold.

SECT. I.

Of Tulips.

OF all which the *Tulip* hath obtained and not undeſervedly the preference, yielding ſo great a Variety, that they are not here to be enumerated, every Year producing new Flowers. Nor is it all the words I can invent can convince you of the beauty of theſe Glories of Nature, but muſt refer you to the choice, your ſelf or friend for you, can make out of that Magazin of Varieties that are collected for the Ingenious Floriſt.

Their Colours are various, from the deep-

deepeſt dy of any other Flowers to the pureſt White, intermixt with the brighteſt Yellow, tranſcendent Scarlet, grave Purple, and many other compounds of theſe inclining to the Blew and Green.

Their Seaſon of Blowing continues long, the *Præcoces* or *early Tulips*, beginning ſome of them to blow at the Vernal Æquinox, the *Medias* which are the prime, continue all *April* and ſometimes the half of *May*, till the end whereof the *Serotinés* or late Flowring Tulips continue.

When the principal of them diſplay their Colours in the heat of the day, there is not a more glorious ſight in Nature, nor is it to be imitated by Art, no Limner nor Painter dares pretend to ſo great skill : but as all things elſe that are in exceſs are ſooneſt apt to decline, ſo theſe that precede all others in beauty and luſtre, ſooneſt fade, not any of them continuing in its Glory above eight or ten days, unleſs the mildneſs of the weather or ſome artificial ſhade preſerve them, nor are they ſucceded by any other from the ſame root.

Tulips are not only preſerved by taking them up yearly, when the ſtalks are turning yellow or begin to be dry, but are

are by that means multiplied and increaſed exceedingly. The uſual way is to take them up at that convenient time, and ſpread them thin on ſome board or floor until they are thorow dry, then cut off the ſtalks and ſo let the roots lye in ſome box or boxes or other convenient places until *September* or *October*, then ſeparate the main Bulbs from the leſſer Chives, taking all that are large (and round though ſmall) for Roots that will yield you Flowers the next year, and ſet them in the places appointed for them, but let the ground be digg'd or otherwiſe looſened, that the Root may the better dilate it ſelf and encreaſe, for in a narrow or ſtiff hole, your Root will remain till the next year as you left it.

When you plant them, ſtick into the ground by them ſmall ſticks marked with the numeral Letters, which you may do *ad infinitum*, and in a ſmall book for that purpoſe, may you inſert the mark and name of the Flower.

When you take them up and diſperſe them into boxes or other receptacles, you may transfer the marks with them.

The ground you plant them in, ought not to be too luxurious, this *Noble Flower*

is

is content with a little Room and poor Soyl.

In the worſt mold this Flower better thrives,
And barren Earth miraculouſly gives
More beauty to it, than a fertile ground,
And when leaſt ſtrong, it is moſt comely found.

The vulgar field or hazle Earth with a little mixture of Sand in it is the beſt, for the richneſs of the Soyl cauſes them to run (as they term it) into dark and plain colours. But if your ground be naturally rich, or that your *Tulips* have grown ſeveral years in it, you may abate it and ſupply it with that which is fit, or lay a bed of ſandy Earth about a finger thickneſs below the *bulb*, when it is in its proper place, that ſo the fibres may receive a check. *Tulips* may be raiſed in *January* and *February* on hot beds, but they muſt be the *præcoces* that are to flower early.

Some preſcribe to plant your *Tulips* in a natural earth ſomewhat impoveriſh'd with ſand, ſo that a little below the root the earth may be better within reach of the Fibres.

If the ground be digg'd where your *Tulips*

lips ſtood the laſt year, it is equal to a change of mould, the roots rarely falling into the ſame Earth again where they were before.

Your ſmall Cions or off-ſets you may plant in a Bed by themſelves, which will furniſh you at another time with great variety.

As *Tulips* run or degenerate, take them up and plant them in your outward Groves, your prime colours will multiply faſt enough.

Tulips that are apt to decline towards a ſadder colour, may be taken up a little before they come to flower, and laid in the Sun to abate their luxury, which will make them come better the year following.

From ſuch Tulips that have their *Tamis*, (that is the ſeed-like things that ſtand up about the Seed-Veſſel,) and bottoms of dark colours, and their Seed-Veſſel three ſquare, may ſeeds be obtained when they are thorow ripe in *June* or *July*, that may after a long expectation afford you great variety of Flowers. Theſe ſeeds may be ſown in *September*, and every two years removed until they yield bloſſoms; but this labour and patience are

too

too great for an ingenious, and fit only for a dull *Floriſt.*

The often removing of the roots of *Tulips* and their off-ſets into various ground, gives you a great encreaſe and great variety of colours, without that tedious way of raiſing them.

The next of kin to the Tulip is the *Fritillary*, whereof there is ſome variety, as the White, Yellow, Red, dark coloured, ſome of them checquer'd and thence called the *Checquered Tulip*, but the double is the moſt rare, their ſeaſons and manner of ordering much like that of the Tulip, only the dry Roots ought to be planted about the beginning of *Auguſt.* 2. *Of Fritillaries.*

SECT. II.

Of Hyacinths and Star Flowers.

THe *Hyacinths* are all bulbous rooted, except the tuberous rooted *Indian Hyacinth*, which we reſerve for the conſervatory. The ſorts of them that are termed Muſcaries or Grape flowers, whereof there are many diverſities, as Yellow, Aſh coloured, Red, White, Blew, and Sky colour-

coloured, are pretty things, and may for variety ſake but not for their beauty be planted.

But there are other varieties of them, as the *fair hair'd branched Jacinth*, the *fair curled hair'd Jacinth*, the Blew, White, and Bluſh, *ſtarry Hyacinth* of *Peru*, and the blew Lilly leaved *ſtarry Hyacinth*, that yield fair Flowers on large ſtalks that adorn your Garden and Flowerpots. Theſe flower in *May* and may be removed in *Auguſt*, they loſe not their fibres, and are therefore not to be kept long out of the ground.

There are ſeveral ſorts of them that loſe their fibres, and may be kept longer out of the ground, and are to be preferr'd to the other, for that they come early in the year from *February* until *April*, and are very ſweet and well coloured.

The principal whereof is the great Oriental *Hyacinth*, called *Zimbul Indi*, or *Pas toot*, or *Celeſtial Hyacinth*, from its fair bloſſoms.

Some are more double, as well White as Blew, and therefore are to be eſteemed, the vulgar are ſome white, ſome of a Cream colour, others of a deep blew and ſome of a pale, but all are very becoming a Garden in

in the Spring of the year, before they are over-matched with flowers of a nobler Hue.

The neareſt of kin unto the Hyacinths are the Star-flowers, whereof ſome of them are valuable, as the *Ornithogalum Arabicum* or *Star-flowers* of *Arabia* which flowers in *May*; the great white *Star* of *Bethlehem* in *June*; the *Star-flower* of *Naples* in *April*, and the *Ethiopian* in *Auguſt*: theſe of *Arabia* and *Ethiopia* are tender, and coming out of ſo hot Countreys will not endure our ſevere Winters, therefore their Bulbs muſt be planted in rich warm earth in Boxes or Pots, and ſecured in Winter from froſts. *Of Star-flowers.*

SECT. III.

Of Daffodills.

THE *Narciſſus* is a Flower ſo well known, that it's needleſs to ſpend many words on it but for its great variety, bright colour, and early flowring, the better kind of them deſerve to be planted here and there under your *Groves* and *Avenues*, and other *Shades* where they

 proſper

proſper very well, and waſte no ground: they are hardy plants, and multiply much, ſome of them are white and ſweet-ſcented, blowing late in the Spring; ſome are ſingle, others double, and others very double, ſome bear many flowers on a ſtalk, others but one; ſo that from the end of *March* to the beginning of *May* they furniſh you with flowers for your Pots.

The *Junquils* are of the ſame kinds and afford ſome variety, and flower much about the ſame time with the Daffodils.

The *Leucoium* or Bulbous Violet is reckoned amongſt the Daffodils; it is ſometimes called the *Snow-drop*, becauſe it ſhews its Snow-white flowers ſometimes in *January*, and generally not long after, for which early blowing it is eſteemed.

SECT. IV.

Of Lillies.

UNder this name have been of old many famous flowers. Some imagine the moſt illuſtrous *Tulip* was once intended by it, when *Solomons* glory was eſteemed inferior to one of them, but there is little reaſon for that opinion: for in *Pliny's* time

time near about the time of our Saviours being upon earth, the *Lilly* was in great eſteem, than which no flower was more in requeſt in the choiceſt Gardens, except the *Roſe*, which *Solomon* himſelf admired as well as the *Lilly*; and then the *Tulip* was but a hedge Flower, and ſo remains in the Aſian Continent, as is reported; Neither is there any Flower of that tranſcendent whiteneſs (an Emblem of Purity and Innocency) as the *Lilly*.

But there are of ſeveral colours and ſeaſons, flowers that are of that Family: As for the Spring the *Crown Imperial*, ſingle and double, Orange coloured, red and yellow, they are but dull Flowers. *Crown Imperial.*

Then there are the vulgar *Red Lilly* ſingle and double, whereof only the double is worthy your notice. *Red Lilly.*

The *White Lillyes* both ſingle and double are planted in moſt Gardens for their colour, and the uſe of their roots, which in *Pliny*'s time added much to the reputation of the Plant. *White Lilly.*

Of *Martagons* there is great diverſity, the *Imperial*, the *White*, *white ſpotted*, *Red* and *red ſpotted*, *Yellow* and *yellow ſpotted*, with divers other variations, but none of great value. *Martagon.*

SECT. V.

Of Saffron Flowers.

Of the Colchicum.

THe *Colchicums* or *Meadow Saffron*, ſo termed, being firſt taken out of the Meadows. Theſe Flowers are called *Naked Boyes*, becauſe they appear naked out of the Earth, and are withered and gone before the green leaves appear.

Of theſe *Colchicums* there is ſome variety beſides the plain colour, ſome ſtriped, others chequered, whereof the *Colchicum Chio* is the moſt beautiful, but the double is the more ſplendid, gracing your Garden in the Autumn when moſt other Flowers are faded. All theſe variegated and double Flowers are to be eſteemed for that they come ſo late in the year, and make a delicate medly: they put forth their green leaves early in the Spring following, and when thoſe wither they may be taken up and encreaſed, and replanted about the end of *Auguſt* following.

Of the Crocus.

The *Crocus* or *Saffron Flower*, ſo called from its reſembling that Plant in Root, Leaf and Flower. There are great variety of theſe Flowers, and much variegated or ſtriped

ſtriped with White, Yellow and Purple, their three principal colours.

They bring forth their pleaſant but ſhort Bloſſoms in *February* and *March*; there are ſome of them *Autumnal* that flower in *September* and *October*, as doth the true Saffron: the Roots are taken up when the Leaves wither, and planted again about a month or two before their flowring time: they increaſe very much, and adorn the edges of Borders, or cloſe under Walls or Pales.

SECT. VI.

Of ſeveral other bulbous rooted Flowers.

THere are ſeveral other bulbous rooted Flowers, which for variety are to be entertained, as the *Moly*, whereof there are many different ſorts that are in flower in *May*, *June*, and *July*, and ſerve to mix in your Flower-pots and Chimnies: they are planted and increaſed as other hardy Bulbs. *Of the Moly.*

The *Aſphodils* are of no great beauty: but may be planted and increaſed as other Bulbs for their variety. *Of Aſphodils.*

Of Spider Wort. As may the *Phalangium* or *Spider wort*, whereof there are the *White* and the *Blew*, ſome flower in *May* and *June*, but the *Blew* in *Auguſt* and *September*.

Of Corn Flaggs. *Gladiolus* or *Corn Flagg*, there are ſeveral ſorts, *Red* and *White*, and ſerve only for Flower Pots and Chimnies, are hardy, and to be planted and increaſed as the other Bulbs.

Of the Orchis. Of the *Satyrions*, or *Bee flowers*, or *Gnatt flowers*, there is ſome diverſity, they are taken out of the Fields and Meadows, are very beautiful where they are remote from the place of their extraction, they are very tender and therefore are cauteouſly to be removed, they are to be taken up Earth and all, unleſs you can obſerve where to find them when dry, you muſt endeavour to plant them in Ground connatural to that from whence they came.

Of Dens Caninus. The *Doggs Tooth Violet*, ſo called from the likeneſs of its Bulb to Doggs Tooth, there are of them Purple, Red, White and Yellow, they are in much eſteem being brought far, and difficult to be obtained, not increaſing in this Country; they are planted in good natural (not dunged) Soil about the middle of *Auguſt*, and flower in *March*.

The

The *Cyclamen* or *Sowbread* for their curious and odoriferous bloſſoms are received in the Gardens of the beſt Floriſts. *Of the Cyclamen.*

The Grecian Cyclamen *from far they bring,*
The Red and White both flouriſh in the Spring. Rapinus.

Some ſorts of them alſo flower in the Autumn, and one or other of theſe beauties adorn your Garden from *April* to *October.*

Their Roots do not loſe their fibres, and are therefore difficultly removed, their time of removing is in *June* or *July*, or before their time of blowing. They are raiſed of ſeeds which muſt be ſown, as ſoon as ripe, in boxes, and then at two years end tranſplanted into your Garden, where they will endure any weather.

SECT. VII.

Of the Iris, Bulbous, and Tuberoſe.

TO conclude this Chapter of *Bulbous* rooted Flowers, I ſhall here inſert the *Iris*, there being of them as well with bulbous as tuberoſe Roots, not that they *Of the Bulbous Iris.*

are inferiour in beauty to any of thoſe preceding, except the *Tulip*, but that I am unwilling to divide them whoſe Flowers retain the ſame form, although they differ in their Roots.

Now Iris *ſprings which from the heavenly bow,*
Is nam'd, and doth as many colours ſhow:
Its Species, and its Tinctures different are,
According to the ſeaſons of the Year.

Rapinus.

The *bulbous* afford very great variety, ſome of them (as the *Perſian*) flowering in *February* or *March*, others in *April*, *May*, *June*, and *July*. There are ſome of them very fair and beautiful, their Colours are either *Blew*, *Purple*, *Aſh coloured*, *Peach coloured*, *Yellow*, *White*, or Variegated. Their Roots may be taken up as ſoon as the Leaves begin to wither, for ſoon after they are quite withered, the bulbs will iſſue out more fibres, and then it is too late to remove them, otherwiſe you may keep them dry till *Auguſt*.

They delight in a good ground, but not too rich, on a ſunny bank, but not too hot to the *South* or *Weſt*, the Eaſtern Aſpect is the beſt.

Thoſe

Thoſe *Flower de Luces* with tuberous Roots are not altogether ſo various as the bulbous, yet affording to the ingenious Floriſt many curious Flowers, the beſt and moſt excellent whereof is the *Chalcedonian Iris*, vulgarly called the Toad flag from its dark marbled Flower. This Species of them ought to be carefully ordered, elſe it will not thrive well, it requires a warm and rich Soil to be planted in, and becauſe it is apt to ſhoot forth its green Leaves before Winter, it expects to be a little defended from the cold. Theſe Bulbs may be taken up when the Leaves begin to be dry, and kept ſome time in the houſe, and then replanted in *September* or *October*, which will make them thrive the better. *Of the Tuberoſe Iris.*

The other ſorts of the *Tuberoſe rooted Flower de Luces*, are much more hardy, and increaſe exceedingly in good ground, and are therefore not ſo fit for your choiceſt Garden.

CHAP.

CHAP. IV.

Of Tuberoſe rooted Flowers.

AFter having paſſed over thoſe curious Plants and Flowers, that are with the leaſt pains and care to be planted, propagated and preſerved, I ſhall now give you a brief account of ſuch that are a little more difficult to be managed, yet require they no more trouble than they ſufficiently recompence with their moſt pleaſant Flowers: The moſt ſelect whereof is the *Anemone*.

SECT. I.

Of Anemones.

THe *Anemone*, which is a *Greciſm* ſignifying *Wind*, thence it is called the *Wind Flower*, for that it is obſerved never to open but when the Wind blows, or at leaſt in thoſe Countries where it is naturally produced it may have that property. It was in great eſteem amongſt the Ancients

cients for the beauty of its Flowers mix'd in their *Chaplets* and *Garlands*, although then there were not a tenth part of that variety of them that now the curious have collected and propagated.

It is one of the Beauties of Nature, and the moſt excellent that ſeaſon can afford, bearing ſuch different Flowers, that they make the cold *March* almoſt equal in Glory to the Summer, which is a wonder that ſuch ſoft *Flowers* and *Tyrian* and *Scarlet* dyes ſhould be produced in ſo early a ſeaſon, which are uſually the effects of a continued Calidity.

What angry Deity did firſt expoſe,
To the rough Tempeſts and more rigid Snows,
The ſoft Anemone, *whoſe comely Grace*
A gentler ſeaſon and a better place
Deſerves: for when with native purple bright,
It ſhews its Leaves to the propitious light,
With different Colours ſtrip'd and curled Flames,
Encompaſs'd, it our love and wonder claims.
There is not any other that out-vies,
This Flower's curl'd leaves or numerous dyes,
Nor the Sidonian *Art could e're compoſe,*
So ſweet a bluſh as this by Nature ſhows. Rapinus.

As

As of the *Tulips*, ſo of theſe, the beſt way is to pleaſe your ſelf in your election from the view of them. The uſual deſcriptions can never ſufficiently nor ſatisfactorily inform you of their real worth.

They are generally of two ſorts, broad leav'd *Anemones* and narrow leav'd *Anemones*, thoſe with narrow leaves much reſemble Parſley, whence they were anciently called *Roſe Parſley* or the *Parſley Roſe*.

The Soil wherein they delight muſt be fat and rich, manured with Sheeps dung and Neats dung, with a little mixture of Lime, all thorowly rotted.

About the end of *September* or beginning of *October*, you may plant your *Latifoles* or broad leav'd *Anemones* about three fingers deep, and about a Month after your *Tenuifoles* or narrow leav'd *Anemones*, which yield their Flowers after the other.

But if you deſign to have them more early, you may plant them ſooner, and with Mats ſecure them againſt the cold, and give them all advantages of the *Sun* and warm Rains, for the Froſts are very apt to nip their leaves when above ground, and impede their flowering for that year.

If

If you desire *Anemones* to flower late, then keep them out of the ground as long as you can, some will abide out of the ground until *February* or *March*, and plant them in shady places, or artificially shade them. Thus may you have *Anemones* after the usual natural time of flowering.

When their green Leaves turn yellow, or about the end of *June* or in *July*, you may take them up and preserve the Roots dry till the season for interring them, for after they have lost their Fibres they are apt to perish by the humidity of the earth. The place you keep them in ought to be cool as well as dry.

It is very injurious to the *Latifoles* to break their Roots, which should only be parted as they are naturally apt to be divided, but the *Tenuifoles* will endure an easie Rupture or Scissure.

If you preserve your *Anemone* Roots in a cool place until the middle of *January*, and then plant them, they will be the more secure from the injuries of bad weather, much wet prejudiceth as well as severe cold.

As your *Anemones* are prejudiced by overmuch wet, so do they require and deserve a little irrigation in very dry Springs, and

and will ſufficiently gratifie you, a little ſhade will alſo advantage them in the hotteſt times of the day.

In *May* will theſe Flowers bear ſeeds, which gathered and ſown in *July* in good ſifted earth in beds or boxes, will produce great varieties in the third or fourth year after.

Mix the down that contains the ſeeds, with ſome fair dry earth, and rub it together in a wooden veſſel, and the ſeeds will mix with the earth, by which means you may ſowe them equally, be ſure to ſowe them not too thin.

After you have ſown your ſeeds, ſift earth upon them about half a finger in thickneſs, when they have been come up about a month, ſift more earth finely over them about half an inch, and cover them at ſome diſtance all the next Winter.

The *Auguſt* following you may remove them into convenient beds, where they may remain till they bear Flowers, at which time you may cull them as you pleaſe.

Forget not a gentle irrigation to your young *Anemones* in dry Weather, for it will much forward them, as will a little Artificial ſhade at opportune ſeaſons.

The

The *Ranunculus* or *Crowfoot*, being ſo near in reſemblance to the *Anemone*, differ very little from them in their ordering. *Of Ranunculus.*

They exceed all Flowers whatever in the richneſs of their colours, nor is there any Flower ſo fine and fair as are the larger ſorts of them.

Their times of Flowering, taking up, and Planting, are near about the ſame time as the *Anemones*, but they agree better with a richer mould than the other.

They are not ſo apt to multiply their Roots unleſs their ground be rich and light, therefore it is by the moſt skilful preſcribed, to lay a broad bed of old Thatch or almoſt rotten Straw, and on that to ſift fine rich Earth ſix or eight inches thick, and therein to plant your *Ranunculus*'s, wherein they will thrive and increaſe.

If you plant them early in the Winter, they muſt be defended from the ſharp Winds and Froſts, but if late there is no neceſſity of it, they are ſomewhat more tender than the *Anemone*.

Irrigation in a dry ſeaſon, much advantages this Flower, as it doth the *Anemone*.

SECT.

SECT. II.

Of Peonyes.

THis although a common Flower, yet yields the faireſt and moſt double bloſſom of any, and very well becomes your Chimney or Flowerpots. But the *White*, *Purple*, and *Changeable Peonyes* are acceptable in the Gardens of the beſt *Floriſts*, and the ſingle *Peonyes* in the Phyſick Garden, for their ſpecifical virtues of their Roots againſt the moſt dangerous of diſeaſes.

The manner of their planting and ordering is known to moſt that have any intereſt in a Garden, only it is neceſſary to underſtand, that *September* and *October* are the fitteſt times for their tranſplantation.

CHAP.

CHAP. V.

Of divers other Select Flowers.

SECT. I.

Of Gilliflowers.

NOtwithſtanding the *Flower-bearing Trees* are compleat Ornaments with little trouble, the *Bulbous rooted* Flowers ſo illuſtrious that they merit great eſteem from the moſt curious, being leſs ſubject to caſualties than moſt others, and the *Tuberoſe Roots* yield ſuch incomparable beauties in the Spring; yet muſt they concede to the *Gilliflower*, the pride of the Summer, that hath its ſcent as pleaſing as its variegations beautiful.

Lovely Carnations then their Flowers dilate,
The worth of them is, as their beauty, great.
Their ſmell is excellent.——— Rapinus.

Their colours are not many, but infinitely and variouſly compounded, and being ſo eaſily and frequently raiſed of

ſeed, do annually produce new mixtures, and thoſe have impoſed on them new Names, that it is impoſſible to give you a true account of them, therefore it will be more proper for you to pleaſe your own fancy, or confide in the integrity of a Gardener, than to truſt to the lame deſcriptions you may meet withal, or to the florid Names that are given them, on purpoſe to beget your admiration of ſuch that little deſerve it.

Their times of Flowring are generally in *July* and *Auguſt*, ſometimes the early Buds may yield you Flowers in *June*, but their latter Buds in *September* and *October*, and by careful defending them in *November*.

The right *Dutch Gilliflowers* rarely produce Seed here, but when they do, you muſt preſerve it from wet till it be ripe, then gather it and lay it by in the Husk until the Spring.

In *May*, after the cold Nights are ſpent, is a good time to ſowe theſe Seeds, which ought to be on good Earth, in ſome ſhady place where it may have the morning or evening Sun only.

They ſhould be ſown thin, and the Earth ſifted over it half a Finger thick.

In *Auguſt* or *September* following you may

may remove them into their proper Beds, and the Summer following, they will inform you of their worth by their Flowers. The ſingle and poorer ſort reject, and thoſe that blow fair and whole, or are well marked, preſerve.

For the firſt Winter after ſowing them, there is little danger of their being hurt by cold, in that particular they are like the *ſtock-Gilliflowers*, which in their firſt Winter are extream hardy, and in the ſecond very tender.

You may plant your beſt *Gilliflowers* in Pots filled with Earth for that purpoſe, that you may give them *Sun* or *Rain*, according to the Seaſon of the Year, and as they require.

Plant them not under a Wall or other Fence, that may reflect the heat of the *Sun* upon them, for they delight in an open Air, and not in intemperate heat.

Great Rains, eſpecially in the Winter and Spring, prejudice them much, therefore you are to defend them from it equally as from cold. Thoſe Flowers that are planted in Beds and not in Pots, are to be defended from wet and cold as there is occaſion, by ſome Cover or ſhelter to place over them, which muſt be open at

the top or on one ſide: the fitteſt for this occaſion are old Beehives, with a Door of about a Span ſquare on the ſide that may be open off from the weather which you defend them againſt.

You may increaſe your Flowers by laying them in *June*, *July* and *Auguſt*, but in *June* or *July* is the beſt time, the method is thus, Firſt trim your Slip you intend to lay by clipping off the ſide Leaves and topping the other: then with a ſharp Penknife cut a Tongue half through from one of the middle Joynts under the Slip, to the next Joynt towards you, beginning next the Root and cutting upwards, looſen the Earth under it, and with a ſmall hooked Stick force it down, that the Tongue or ſlit may open, and the end of the Slip point upwards, cover it with Earth, and water it, which irrigation muſt be reiterated according as the drought of the ſeaſon requires it.

If the Slips be ſo high that they cannot be bent to the Ground with eaſe, then take a ſmall earthen Pot with a ſlit on the ſide, in which you may diſpoſe of your Slip as you deſire.

About a Moneth after, your Layers will have taken Root, then may you take

take them off with ſome of the adhering Earth, and plant them in their places prepared for them.

But if any ſhould not have taken root, you may anew lay them and make the cut a little deeper, and ſo let them remain till the Spring, and then you may plant them out as you ſee fit.

Plant your Layers not too deep, for thereby many a good Plant hath been ſpoiled.

A Cave or Pit made in ſome place in your Garden would be very convenient to place your Pots of Flowers in, for there no Winds nor ſevere Froſts can annoy them, the driving Rains alſo cannot much offend them.

The morning *Sun* is the moſt benign to your *Gilliflowers*, therefore you may defend your moſt choice from the afternoon *Sun* by ſome artificial Skreen, in caſe you have no place naturally poſited for that purpoſe: this to be done before and in blowing time.

To have *Gilliflowers* or *Carnations* (as they are vulgarly termed from thoſe ancient Engliſh Flowers that were uſually of a Fleſh Colour) during the moſt part of the Winter, they may be placed in Pots in ſome convenient room open to the South, and to be ſhut at pleaſure to de-

fend them from the cold, unleſs to give them the benefit of the warm *Sun*, at noon ſometimes, or a little ſoutherly Rain, into which room may be conveyed ſome warmth from your ordinary Fire, or elſe a Fire therein on purpoſe, I ſuppoſe a Lamp may be maintained burning at an eaſie expence in a cloſe room, which may be ſufficient to defend them from froſt, a conſtant though ſmall heat will effect much, the Lamp may alſo be enlarged as the room or ſeverity of the weather requires, the ſmoak of the Lamp may be conveyed away by a Funnel over it for that purpoſe, thus may many other rarities be preſerved over the Winter at an eaſie charge.

The Earth about your *Gilliflowers* ought to be renewed once in two Years at the leaſt, for by that time they have exhauſted the better and more appropriated part of the Earth or Soyl.

Your Flower Pots ought to have holes in the bottom to let out the ſuperfluous moiſture, and alſo in caſe you are willing to water your Flowers, you may dip the Pots half way into a Tub of Water prepared, the one after the other, and the Earth will attract the Water through the holes, which is much better than ſprinkling.

If

If you have any *Gilliflowers* that are broken, ſmall, or ſingle, you may graff on them other *Gilliflowers* that are more choice, but graff them in the moſt woody part of the Stalk, the beſt way is by whip-graffing.

Pidgeons dung being the hotteſt of dungs applied about the roots of *Gilliflowers*, maketh them flower the more early.

To defend your *Gilliflowers* from the injury of cold and froſt, ſuch of them that are placed in beds and not moveable, ſome have preſcribed to take two ſlender Wands or bending Sticks, and fix each end in the ground on each ſide of the Flower, that the Sticks may Arch-wiſe be acroſs over the Flower.

If your *Gilliflower* or Layer be inclinable to ſhoot up in the Summer with one ſingle ſtem, ſuffer it not to bloſſom that Year, but nip or cut the ſtalk off, leſt it give you a fair Flower and never thrive after.

Pinks though mean Flowers ſingly of themſelves, yet the Common red ſingle ſort of them, planted on the edges of your Walks againſt the ſides of your banks, do not only preſerve your banks from foun- *Of Pinks.*

dring or mouldring down, but when in bloſſom are a very great Ornament, and moſt excellently perfume your Garden.

Sweet williams. *Sweet Williams*, *Sweet Johns*, and *London Pride* are pretty fancies, and near of kin to the old Engliſh *Gilliflower*.

SECT. II.

Of Stock-Gilliflowers and Wall-Flowers.

Stock-Gilliflowers. THe *Leucoium* or *Stock-Gilliflower* is a Flower of much beauty, delicate ſcent, and ſome variety, a good Garden cannot be ſaid to be well ſtored without them, nor a Flowerpot well adorn'd without ſome of theſe, they continuing long in bloſſom, from *April* till the Froſt prevents them. They are generally raiſed of ſeed, and the firſt Winter, becauſe they have not yet ſpent their finer ſpirits, they are very hardy and endure any weather, but the next Winter they are very tender.

With curled Threads and top divided now,
Along the Margin of your Borders grow
Stock-Gilliflowers, whose blushing leaf may fear,
And justly too, the sharpness of the Air.

The double, whereof some are strip'd and some plain, are very pleasant, but the double yield no seed.

The single have generally four Leaves in a blossom, but if there be five Leaves, the seed thence produced will bring double Flowers.

The white single usually produce double Flowers, as also do those that are strip'd with white.

The yellow double *Stock-Gilliflower* is the most rare of any.

The seeds of those kinds that usually produce double Flowers, being often sown in the same soil, will degenerate into all single, and by degrees into all plain colours, as I have tryed. *Quære*, if they will do the same if sown in barren earth.

There is another sort of *Double Stocks*, that are not raised from seed, only by Slips and Layers, that is more durable than the seedlings.

Those

Thoſe raiſed of ſeed will ſometimes abide the ſecond Winter if it be mild, or the Stocks well defended; if you take away the blowing Sprigs the precedent Autumn, it will much further their duration.

They may be laid as other Plants are, and kept ſecure from violent colds will endure the Winter.

They may be planted out in Slips, if you take ſuch that are not ſpired to blow, and cut them from the Stock, and ſlit the end in three or four places about half an inch, and peel the rind back as far as the Slit, and take away the inward wood: then ſet this Slip with the Rind ſpread every way about two or three fingers deep, water it and ſhade it until it hath taken Root, by this means may you maintain your ſtock of *Double Stocks*, without the two years expectation.

The ſeeds from which you expect to have double Flowers, muſt be ſown at the full of the Moon, or in two or three days after, and when come up four or five inches high, take them up and plant them out, which prevents their running up to ſtalk, which labour you may reiterate twice before Winter.

If

If you remove, water, and ſhade them every time to preſerve them, (it being a Summer work) and do it the firſt time three days after the Full, and twice more before the next Change, and again three days after the next Full, and once more before the ſucceeding Change (all theſe removes to be in barren ground.) Then at the third Full Moon, eight days after remove them again into rich ground wherein they are to ſtand. It is ſaid that it will make them bring forth double Flowers. Sir *Hugh Plat.*

It hath been long obſerved that the Moon hath great influence over Plants, (over Animals it is very conſpicuous.) From *Pliny* to this day moſt *Authors* have been of that opinion. And if it hath any ſuch influence, then ſurely it is in the doubling of Flowers, for we daily obſerve that many ſorts of double Flowers will degenerate themſelves into ſingle, and that moſt of thoſe double we have (which are of the kinds uſually ſingle) are propagated by Art and induſtry, and why may not the *Lunar* influence contribute much thereto? The *French Poet* was of that opinion, although differing as to the time.

Till

Till it be full Moon, from her first increase,
The Season's good; but if she once decrease,
Stir not the Earth, nor let the Husbandman,
Sowe any seed; when Heav'n forbids 'tis vain.

The same Poet adds.

Some in preparing of their Seed excell,
Making their Flowers a larger compass swell,
Thus narrow Bolls with curled Leaves they fill,
Helping defective Nature by their skill.

Often removing them doth not only contribute to their worth but duration.

The *Keiri* or *Wall-flowers*, so termed, for that the single kind naturally affect to grow on old Walls, and that the double need the assistance of some Wall or other support, are hardy Plants, though not altogether secure in the most severe Winters, and the better sort of them, that is, the *double white*, and the *double red*, very pleasant both to the Eye and Smell, they are easily increased by Slips and Layers.

SECT.

SECT. III.

Of Auricula's Cowslips, and Primroses.

BEars Ears or *Auricula's*, considering their size, are the finest Flowers the choicest Garden yields, affording a very great variety in form as well as in colour, and are not only beautiful to the Eye but pleasant in scent. *Of Auricula's.*

In your election of them, it is better to trust your Ey, or confide in an honest Gardner, than in the lame descriptions of them, as before was hinted concerning the choice of *Tulips* and *Gilliflowers*, only that the double is the most rare, and the *Windsor Auricula* the most splendid of all the rest.

They adorn your Garden in *April* and *May*, and some of them again about the end of *August*, and until the Frost prevent them.

If you crop off the Buds that offer to blow late in the Autumn, it will cause your Auricula's to yield you the fairer Flowers in the Spring.

They delight in rich Soyl and shady, but not under the drip of Trees.

They

They must be often removed, once in two Years at least, and the Ground enriched, else they will decay.

The striped and double must be removed oftener or else they will degenerate.

If you set them in Pots (which is the best way to preserve them) fill the Pots almost half full with sifted Neats-dung, the rest with a good light Mould enriched with the same Dung.

In the Winter place them in the *Sun*, but in the Summer in the shade.

Defend them from wet in the Winter, but they endure all cold very well.

You may raise them from Seeds by carefully gathering the Seeds, and preserving them in their Umbels till about *August* or *September*, when you must sowe them in Boxes almost filled with the mixture you made for the Plants, and about a Fingers thick at the top with fine sifted Willow Earth or dryed Cowdung, beaten small and mixed with the Earth, in which sowe your Seeds mixt with wood Ashes, then cover them with the same mixture of Earth sifted thereon, about *April* following they will come up, then may you plant them abroad, and they will yield you Flowers, some the *August* following.

lowing, others the next ſucceeding year.

There are ſown very pleaſant Cowſlips of ſeveral ſhades of red, the *hoſe in hoſe*, the *green Cowſlip* and the *double Cowſlip*, that are worth your planting, they are very hardy, and muſt be ſometimes removed or they are apt to degenerate. *Cowſlips.*

The ſame is obſerved of the Primroſes, which yield the like variety of Colours, and are entertained for their early welcoming in the Spring. *Primroſes.*

On a broad Leaf the Primroſe firſt will blow.

SECT. IV.

Of the Lilly of the Valley and Hellebor.

THe *Lilly Conval* although wild in ſome places Northward (as many fine Plants are in one place or other) is yet entertained in many good Gardens, for its rich ſcent almoſt equalling the *Orange Flower*, the uſe of this excellent Flower in ſeveral preparations, and its ſpecifick properties and vertues in ſome diſeaſes, makes it the more *Lilly of the Valley.*

more acceptable, it is eaſily propagated from Plants, is hardy and delights in the ſhade.

Hellebor. The Black *Hellebor* flowereth about *Chriſtmas*, and for that cauſe only is reſpected and not for its beauty, the beſt ſort of White *Hellebor* with red Flowers is a Plant in great repute amongſt Floriſts, its Leaves making alſo a comely ſhew, and flowers in *April* and *May*.

Calceolus Mariæ. Our *Ladies Slipper* (an *Helleborine*) is much valued by moſt Floriſts, although wild in many places of the North of *England*, it is probable by reaſon of its name occaſioned by the likeneſs its Bloſſom hath to a Pantofle or Slipper.

It yieldeth its Flowers early in the Summer, is a hardy Plant in reſpect of cold, but not very apt to be increaſed.

SECT. V.

Of the Hepatica, Gentianella and Dittany.

Hepatica. THe *Hepatica* or *Liverwort* is a very pleaſant humble Flower, never riſing high, yet yielding its variety of pretty Bloſſoms in *March*; the double and the white

white are moſt regarded and do deſerve your labour and care, which is not much, to plant and propagate them.

The *Gentianella* is another very low Plant yielding in *April* and *May* many blew Flowers of a deep dy, and are therefore regarded by moſt floriſts. *Gentianella*

Fraxinella or *Dittany* is a hardy Plant, annually furniſhing you with tall ſtalks full of not unpleaſant Flowers in *June* and *July*, and is raiſed by Plants or Seeds. *Dittany.*

CHAP. VI.

Of Flowers raiſed only from Seed.

THe great diverſity of Flowers we have hitherto had the pleaſure to name, may be propagated by divers other ways according to their reſpective Natures, than by Seed, but there yet remain ſeveral Flowers not unworthy your care, that are raiſed by no other means than by Seed, as the *Larkes-heels* or *Larkes-ſpurs*, whereof the *Tipt Roſe Lark-ſpur* is the prime, is a very pretty Flower *Lark-ſpurs.*

and well becomes your Walks in *July* and *Auguſt*, or early if ſown before Winter and defended from the moſt ſevere Froſts: they are generally ſown in *April*, the beſt will degenerate being often ſown in the ſame Ground.

Columbins. The Variety of *Columbines* ſingle and double, plain and ſtript, makes them acceptable in a good Floriſts Garden; they are ſown in the Spring, the Young Plants endure the Winter, and the next Year they yield their Flowers. The Roots will continue three or four Years, theſe will alſo degenerate unleſs the Seed be changed.

Of Poppies. There is no Flower can be more glorious than the Poppy, were it as good as great, and as ſweet as well coloured, and as laſting as it is nimble in growth, but their ill ſmell and ſoon fading, makes them the leſs regarded.

Of Hollyhocks. The *Hollyhocks* far exceed the *Poppies* for their durableneſs, and are very ornamental, eſpecially the double, whereof there are various colours; they are ſown one year and flower the next, they may be removed in *Auguſt* or *September*, from your ſeminary into their proper places of growth, which ſhould be near ſome ſhelter

ſhelter from the Winds becauſe of their height.

The *Antirrhinum*, *Snap-dragon*, or *Calves ſnout*, ſo called from the form of its bloſſom, is ſown in Gardens, becauſe it flowers long, and will grow in any place, as on Walls, *&c.* and ſerves for Chimneys and Flowerpots, elſe it is (in a Garden) of no great beauty nor ſmell. *Of Snap-dragons.*

The *Musk Scabious* is one of the ſpecies of *Scabious* or *blew bottles*, and ſo named from its moſt pleaſant ſcent, and called the *Sultans Flower*, becauſe the *Grand Seignior* affected to wear it in his *Turbant*. *Of the Sultans Flower.*

This though mean to the Eye, yet is a Plant worthy of place among your choiceſt Flowers, in kind years and good ground it will come up, being ſown in *April* and flowers in *Auguſt*: You may for the more certainty raiſe it in a hot bed, it is alſo ſaid that if it be ſown in *Auguſt*, the Plants will endure the Winter, and blow fair the next year.

The *Aramanthus purpureus* is a fine delicate Plant, bearing ſuch curious Tufts of ſeveral colours, like unto Silks died in Grain. The Seeds being ſown in a hot bed in *March*, and then raiſed under Glaſſes *Of Aramanthus.*

in the hotteſt place of your Garden and often irrigated, will produce thoſe tufts in *Auguſt* and *September* following, and do deſerve your care as much as any Plant.

Of Marigolds. Of *Marigolds* there are divers ſorts beſides the common, as the *African Marigold*, a fair large *Yellow Flower*, but of a very naughty ſmell, and another ſort much fairer of the ſame colour and of little or no ſavour at all, and for that reaſon is received into ſome good Gardens. They are raiſed of ſeed ſown in *April*, by ſome in a hot bed, but they will in a ſeaſonable Spring thrive well enough without, and yield their beautiful Flowers in *Auguſt* and *September* following.

Of Bindweed. The *Greater Convolvulus* is raiſed by ſeed in the Spring, and more certainly in a hot bed, they twine about ſticks of about half a yard high, and yield their bright blew Flowers in *Auguſt* and *September*, they blow in the evening, and the next morning the *Sun* withers them, but the bloſſoms renew every evening till the Froſts prevent them, they are a comely evening Ornament to a Garden.

Of the Marvail of Peru. The *Marvail of Peru*, ſo termed from its wonderful variety of Flowers on the ſame Root,

Root, it is in many things like the *Convolvulus*, and is by ſome called the Flower of the Night, it is more tender than the other, and is therefore to be raiſed in a hot bed.

Lupines are here ſown in Gardens Annually for the ſake of their Flowers, but in *Italy* an ordinary pulſe ſown in the fields for food for their Cattel, and in thoſe hotter Countries they have a property as *Pliny* relates, of turning their Flowers and keeping their courſe with the *Sun*, whether the Air be cloudy or clear, and that they ſerve inſtead of Clocks or Dials for the time of the day, and by ſome other motions, as Prognoſticks for the Husbandmen to judge of the weather. But in theſe colder parts we propagate them meerly for Flowers, which are the greater and the leſſer blew, the white, and the yellow, which laſt is regarded the more for its ſweetneſs. *Of Lupines.*

There is a ſort of *Kidney Beans* that yields a fine Scarlet bloſſom, for which it is eſteemed. *Of the Scarlet Bean.*

The *Peaſe everlaſting* is ſo called, becauſe although it be firſt raiſed of ſeed, yet it Annually produces new branches which furniſhes you with many bloſſoms of a *Of the Everlaſting Peaſe.*

reddiſh colour, and are not unbecoming a good Garden.

Of the Senſible Plant and Humble Plant.

The *Senſible Plant*, ſo called, by reaſon that as ſoon as you touch it, the Leaf ſhrinks up together, and in a little time dilates it ſelf again: And the *Humble Plant* ſo called becauſe ſo ſoon as you touch it, it proſtrates it ſelf on the ground, and in ſhort time elevates it ſelf again, are both of them raiſed in hot beds, and preſerved with great care, being the moſt tender *Exoticks* we have.

Noli me tangere.

Although the two laſt yield no Flowers, yet deſerve a place in your Garden; and here in this Tract, and becauſe they ſhall not be alone, I will conclude this Chapter with an odd Plant called *Noli me tangere*, becauſe when its pods are groſs and not fully ripe, if you offer to take either of them between your fingers it will fly in pieces, and cauſe the unwary to ſtartle at the ſudden ſnap and ſurpriſe; this Plant is annually raiſed from ſeeds, and only for fancy propagated.

CHAP.

CHAP. VII.

Of ſome more Vulgar Flowers.

THere are many Flowers that either for ſcent or ſhew are raiſed in the more ordinary Country Gardens, that ſeveral Floriſts have taken a great deal of pains and care exactly to deſcribe, and the manner and Method of propagating them, which here ſhall only be named, As the *Aconites* or *Wolf-bane*, *Pile-wort*, *Crowfoot*, *Batchelors-Button*, *Marſh-Marigold*, *Hollow-root*, *Monks-hood*, *Cranes-bill*, *Bell-flowers*, *Champions*, *Nonſuch* or *Flower of Briſtol*, *Princes-feather* or *Common Amaranthus*, *Dames Violet* or *Queens Gilliflowers*, *Rockets*, *Double-Pellitory*, *Double-Featherfew*, *Double Camomil*, *Double-Dog-fennil*, *Double Lady ſmocks*, *Double Daiſies*, *Toad-Flax*, *Fox-gloves*, *Glove-Thiſtles*, *Scabious*, *Blew-bottles*, *Moth-Mullens*, *Nigella* or *Fennel-Flower*, *Thorny-Apple*, *Balſame Apple*, *Apple of Love*, *Candy Tufts*, *Snails*, *Caterpillers*, *Satten-Flower*, and *Flower of the Son*: Theſe every *Colona* knoweth how to plant, ſow, or propagate.

CHAP.

CHAP. VIII.

Of ſuch tender Exotick Trees, Flowers and Plants, that require the Floriſts care to preſerve them in the Winter.

TO compleat your pleaſure, and make your Garden an Object of delight, which is generally placed on rare or unuſual ſubjects as well as on Vulgar Beauties. You may make it capable of nouriſhing and preſerving ſuch natural Curioſities that cannot endure to be expoſed to the *rough*, *fierce*, *ſevere*, and *cruel Blaſts* that *Boreas* uſually emits into our *Engliſh Eden*. And have therein your *Brumal* as well as your *Æſtival*, *Odoriferous* Flowers and pleaſant greens, that nothing may be wanting in your Terreſtial Paradiſe, that Induſtry and coſt may obtain.

SECT.

SECT. I.

Of Perennial greens and ſuch Plants that cannot endure cold.

AS in the former part of this Treatiſe we began at the more hardy *Winter greens*, ſo here it will be not unproper to obſerve the ſame order. And as there we named the famous *Cypreſs* firſt, ſo here ſhall we begin with the moſt beloved odoriferous *Myrtle*, ſo highly eſteem'd by the Romans the great admirers of Rarities, before the foundation of *Rome*: That the ſweet perfume thereof when burn'd, became an attonement for the offence the Romans had committed in raviſhing the *Sabine* Virgins. And its ſacred branches (being firſt conſecrated I ſuppoſe) were ſufficient to purify them from ſo venial a ſin: In memory of which offence and ſatisfaction, on that very place the zealous Romans then erected a Sacred Temple dedicated to *Venus Cloacina*, the Goddeſs of ſuch pleaſures and Patroneſs of the innocent *Myrtle*: Myrtle trees were alſo by the ſame Romans planted and propagated as Omens or Prognoſticks of good or evil

Of the Myrtle.

Cloacina.

evil to their State and Government. So ſuperſtitious were they ever eſteemed.

In *Pliny*'s time was there an old Temple and Altar that had been conſecrated to *Venus Myrtea*.

Cato mentioned the Conjugal Myrtle, which *Pliny* ſuppoſes to have proceeded from that which was dedicated to *Venus Cloacina*, and uſed it ſeems in their Marriages.

Pliny attributes a ſtrange effect to it, That if a man hath a great Journey to go on foot, and carry in his hand a Stick or Rod of the *Myrtle-tree*, he ſhould not be weary, nor think his way long and tedious: It's probable its operations are more vigorous in ſuch places where it naturally delights, than here where a kind of force is put upon it. But we here in *England* can ſecond this Vertue in that of an *Elder-ſtick*, which if a young Horſeman carry in his pocket, although he ride hard and far, yet ſhall he not be galled; as ſome affirm.

Of *Myrtles* here known in *England*, there is the broad leaf'd *Myrtle* and the narrow leaf'd *Myrtle*, both very fine ſweet ſmelling Shrubs; but the moſt elegant is that which in the Autumn affords ſuch plenty

plenty of double white bloſſoms, being a Plant very worthy the care of the moſt ingenious Floriſt, and are not ſo great a vexation as delight, whatever Mr. *Rea*'s opinion is, *Rapinus* ſeems to be of another.

Deſpiſe not humbler Plants, for they no leſs,
Than Trees, your Gardens beauty do increaſe.
With what content we look on Myrtle
Groves!

They are not ſo tender but an eaſie defence will make them endure hard Winters. I have known many Trees planted on borders, endure ſeveral Winters, that have not been over ſevere, and never in the greateſt extremity, required but a tilt from the wind and ſnow.

The Plants produced from Layers are the moſt hardy, thoſe from ſeeds the moſt tender, the ſame it is with moſt odoriferous herbs, as *Thyme*, *Marjerom*, *Hyſop*, *&c.*

If planted in Pots or Boxes, they are eaſily removed into your more open *Green Houſes*, or *Vaults*.

There is a ſort of *Myrtle* with a large leaf called *Spaniſh Myrtle*, that will endure all weather without ſhelter. *Of the Indian Jaſſemine and Spaniſh jaſſemine.*

There are the *Indian yellow* and the *Spaniſh*

Spaniſh white *Jaſſemines* that are very curious Shrubs and yield moſt fragrant Flowers equalling almoſt the Orange Flowers, and deſerve a place in your more open Green Houſe or Vault, where a mean defence will preſerve them from the too great ſeverity of the Winter.

Cytiſus Maranthe lunatus, is a Plant ſown as ordinarily in the *Aſian* Territories, as common Pulſe are here, and is both Branch and Seed, the beſt food for all their Cattel, and is a great encreaſer of Milk in Beaſts as well as in Women, but here with us preſerved as a rarity in Pots or Caſes, and ſo to be diſpoſed in great colds into the Conſervatory.

Cytiſus *natus.*

The *Oleander* or *Roſe-bay*, is a Plant bearing ſome of them bluſh and ſome white Flowers, and will proſper if ſecured from the moſt violent cold as the other before mentioned Plants are.

leander.

The ſame may be ſaid of *Laurus*, *Indica*, although as yet a great ſtranger.

ianBay.

The *Maracoc*, uſually termed the Paſſion Flower, from the Thorns and pointed leaves it hath, repreſenting the Thorns wherewith our Saviour was Crowned, and Nails wherewith he was nailed to the Croſs, as the Authors of the name imagined.

acoc.

This

This Plant encreaſeth much by Cions naturally growing from it, and if the root be preſerved from the extremity of the Froſt it will yield many beautiful Flowers yearly in *Auguſt*.

Snails as naturally affect this Plant, as they do the fruit of the Nectarine Tree, and as Cats do the *Marum Syriacum*, and therefore care muſt be taken to defend them.

Ornithogalon or the *Star Flower* of *Arabia*, which yieldeth a beautiful Flower in *May*, as that of *Æthiopia* in *Auguſt*, muſt be preſerved as the other Plants. *Star Flower of Arabia and of Æthopica.*

The *Indian flowring* Reed, if often watered and ſecured in the *Winter*, yields ſtore of Flowers, but the *Indian Fig* is a very low Plant growing one leaf on another, and is therefore called *leaf* upon *leaf*, and only preſerved in the Winter for the rarity of it, no Plant in Nature being like it. *Indian Reed and Indian Fig.*

The *Male Ciſtus* is a Plant of no great eſteem, yet preſerved for the rarity thereof, as is the *Ciſtus Ledon*. *Ciſtus Mas.*

The *Indian Jucca* not only affordeth us its ſharp pointed Flag like leaves, but ſometimes its beautiful Flower, and is preſerved only for the rarity thereof, and *Jucca.*

uſually

uſually preſcribed to be defended from the Winter cold, but by ſome affirmed to endure the moſt ſevere Weather.

ian *Periploca* or *Virginian Silk*, of little value, is much of the ſame nature, for the defence of thoſe Plants which only ſuffer in extream colds, a ſlight Shelter may ſerve, either as they ſtand abroad in their proper Places, or by removing them into ſome *Garden Houſe*, not ſo cloſe as the Conſervatory for the more tender Plants ought to be.

Or a Vault or Cave may be made a little within the ſurface of the Earth, about the edges whereof may be diſpoſed as you think fit your ſeveral Pots or Boxes.

Or you may ſink a hole for each ſingle Pot or Box, ſo that the Plant may be a little below the ſurface of the ground, over which an ordinary Shelter from the wet may ſerve, or if you ſink it deeper, it will defend your Plant the better.

For as the Earth in the Summer preſerves Plants, or what elſe you place therein, cool from the ſcorching Rayes of the *Sun*, ſo doth it from the extremity of cold in the Winter; Neither hath the Wind or Morning air in that ſeaſon ſo great

great an advantage, over a Plant thus poſited, as it hath if it be on a level.

SECT. II.

Of ſuch Plants that leaſt endure the cold.

OTher Plants there are whoſe deſcent have been from a more hot Climate, and are of themſelves of a more tender nature, than the other before mentioned.

Whereof the *Orange-tree* is the moſt Principal, and deſervedly in great eſteem, not only for its beautiful (though acid) fruit, but for its moſt fragrant Flowers, of which is made ſo rich an Eſſence, and whoſe diſtilled water is of ſo tranſcendent Vertues, that they will ſufficiently recompence your diligence and care in nouriſhing and preſerving the Tree. *Of the Orange.*

Theſe Trees preſerved in ſtrong Boxes may be with eaſe removed into your Conſervatory, and thence in the Summer plac'd in ſeveral places of your Garden.

No

No Tree your Gardens, or your Fountains more
Adorns, than what th' Atlantic *Apples bore.*
A deathleſs beauty Crowns its ſhining leaves,
And to dark Groves its Flower luſtre gives.
Beſides the ſplendor of its golden fruit,
Of which the boughs are never deſtitute.
Rapinus.

They are raiſed of the Kernels ſown in *March* in caſes of rich Earth; theſe fruits were unknown in former Ages to the *Europeans*, and the Trees have not been long introduc'd; and not many years hath that more noble kind the *China Orange* been propagated in *Portugal* and *Spain*, which annually furniſh us with thoſe pleaſant fruits, yet there in a few years have they degenerated, as to ſize and taſte: Its probable the Kernels of thoſe may proſper better with us than the *African*, *China* being not ſo hot.

The fruit with us, although it ripeneth not ſo well as in *Spain*, yet in ſuch years that our old ſtock of imported fruit is decay'd, they ſerve for many Phyſical uſes. But the flowers here are much more valuable than the fruit.

There-

Therefore if a Wall be built near the houſe, and well defended behind and on either ſide from cold winds, and ſeveral leaves or doors of cloſe board made to ſhut before your Wall, and the top well ſecured from Rain, againſt this Wall may you plant your Orange trees, and prune them againſt it without ever removing them; only in the Spring ſeaſon; you may open your leaves of doors by degrees, and at length open it quite before and on the top, only leaving the main ſtays until the next Winter. In the building of this Wall may you contrive Concavities, through which the heat of Fire made in ſeveral places for that purpoſe may paſs behind your Trees, or you may have other Fires in this Shed as in your Green-houſe.

The moſt proper Earth wherein to plant your Orange trees, is that which is taken out of a Melon or Cucumber-bed, and equally mix'd or tempered with a fine loamy Earth, and ſo to remain the whole Winter, then ſifted into the Caſes.

Inſtead of the fat Earth of a Melon or Cucumber-bed, you may uſe Neats-dung, and order it as the Melon Earth.

Before you put your Earth into your Caſes, lay on the bottom a good quantity of Oſier or Withy Sticks, or ſuch like, which will preſerve it light; if they are in a ſmall quantity mixed throughout, it will be the better.

Place them in your Conſervatory before any Froſts happen, and in hard weather give them ſome warmth.

As the Spring appears ſo acquaint them by degrees with the Air, opening the doors at noon firſt and ſhutting them again, then for a whole day if the weather permit. The like diſcretion you muſt uſe when you ſet them into your Conſervatory, not to ſhut them up too cloſe until extremity of weather require it.

As the Trees grow large ſo you may enlarge your Caſes, and take out the Trees, Earth and all, and place them in your new Caſes.

I have heard of a Gentleman that annually makes a Shed or Houſe over his Orange-tree, and as the Tree encreaſeth ſo he enlargeth his Houſe, and that his Tree is very large, and beareth plentifully.

You muſt gather the Flowers as they blow, leaving but few to knit into fruit, elſe

elſe will your Tree ſpend it ſelf in fruit.

You muſt take care to bruſh the Spiders webs off this Tree very gently, for they delight to work on it, the fragrant bloſſoms attracting many Flies.

The Kernels may be planted in hot beds, and will bring fair Plants the ſooner.

Eaſie *Stoves* or *Heats* will ſerve until the Froſts be very hard, then muſt you kindle greater Fires, but let not any Fire come too near your Trees, nor any Smoak annoy them. But if your conſervatory Fire be very cloſe, with Mats that Water will not freeze in it, then there needs not any Fire.

You muſt water them gently when you find they require it, which may be diſcerned by the leaf which will ſoon complain, but give them rather too little than too much, and wet not the leaves.

You ought to renew and alter the Earth as tenderly as you can by abating the upper part of it, and ſtirring it up with a Fork, taking heed to the Roots, and applying the prepared Earth in the room of it, which may be done in *May* and *September*.

If you kindle ſome Charcoal, and when they have done ſmoaking, put them in a

hole ſunk a little into the Floor about the middle of it, it is the beſt Stove and leaſt annoys your Plants.

The Water wherewith you irrigate your *Orange Trees*, ought to be prepared as well as the Earth, you may therefore mix it with Sheeps dung or Neats dung, and let it ſtand two or three days in the *Air* or *Sun*, and it will be very fit for your purpoſe.

Lemmons. *Lemmons* may be ordered after the ſame manner as the *Oranges*, but they are not capable of giving you ſo large a requital.

Amomum Plinii. *Amomum Plinii*, ſo called being a Plant by him eſteemed, and by him reported to be naturally growing in divers parts of *Aſia*, and yielding a rich and coſtly Berry, uſed in perfumes: this Plant is now nurſed up in our Climat, by careful preſerving it in the Winter in the cloſe Conſervatory, where it requires the ſame care as doth the *Orange Tree*.

Geranium. *Geranium nocte olens*, which ſmelleth pleaſantly in the night only, is a tender Plant, and deſerves a place in your Conſervatory.

The *Tuberoſe Hyacinth*, famous for its aſpiring head and moſt fragrant Flowers, ſeeming

ſeeming to contend with the *Orange Tree*, is a very tender Plant, impatient of cold or wet.

The root muſt be taken up in *April*, carefully parted without breaking the greater fibres, and then replanted, the bottom of the Pot filled with prepared Earth, but the roots covered only with natural freſh Earth, and then the Pot filled with Earth prepared, as before; place this Pot in a hot Bed, and there let it ſtand without watering until the Root ſpring, then ſet the Pot under a South-wall, in dry weather water it eaſily. In *Auguſt* it will yield its rich Flowers, and in *September* it muſt be removed into the Conſervatory.

In *September* you may take up the bulbs of this Plant and preſerve them in dry Sand, or when the Roots are dry lay them up in papers in a warm cloſet.

Blew Borage leaved Auricula.

The *Blew Borage-leav'd Auricula*, being leaved like *Borage*, yieldeth fine blew Flowers; it is a rare and a tender Plant, and ſet in a Pot may be preſerved in your Conſervatory, from the extremity of the Winter.

Cortuſa Matthioli.

Bears-ears Sanicle is almoſt of the form of an *Auricula*, is a Plant uſually raiſed of ſeed, planted in Pots and preſerved as other tender Plants.

Marum. *Maſtich Thyme* is a Plant of a curious ſcent, and vulgarly known, apt to be increaſed by Slips, and as apt to be deſtroyed by cold, and is worthy of your care to preſerve it.

Marum Syriacum. *Aſſyrian Maſtich* is of the ſame nature, but ſo abſolute a bait for Cats that they will come far and near to it, to devour it, unleſs you preſerve it with the ſharpeſt Thorns or Furze. Theſe and Maſtichs are beſt preſerved by placing them within the Earth, and covering them.

Several others there are, that are not only tender but rare and acceptable Plants to the ingenious and careful Floriſt, wherewith, according to the magnitude or capacity of his *Green-houſe*, or meaſure of his time he can ſpare about them, he may eaſily furniſh himſelf with all from the great Conſerver of theſe Rarities, Mr. *George Ricketts* of *Hogſden*.

Lib. III.

Of Eſculents or Plants for Food.

AS a *Garden* is the greateſt Ornament to your Seat without doors for the variety of pleaſures it yields, ſo is it of as great advantage and ſatisfaction for the variety it affords you of curious Aliments and Condiments at your Table; not any diſh of Meat can be compleatly ſerved up, without a ſhare of ſome *Hortulan* or other Vegetable.

The meaneſt Cottager may well afford that little ground (if he hath any) that is contiguous to his Tenement, for the propagating of ſome or other of theſe *Eſculents* we are now to treat of: It is not the heat or colours, fatneſs or barrenneſs of his Land can excuſe him here, for there is no Land but is apt to bring you ſome fruit or other of your labour, and where-

in ſome of theſe Plants do delight: If it be a dry hot ſandy Land, *Carrots* will proſper in it; if cold and dry, then *Turnips*, if hot and moiſt, then *Peaſe*, *Beans*, and moſt ſorts of Tillage; if cold and moiſt, then *Cabbages*, *Beans*, &c. will not diſdain it; thus may ſome ſort of Tillage or other be adapted to every ſort of Land.

The accidental or caſual thriving of Plants or Seeds in the various ſorts of Lands hath, within the memory of man, very much encouraged our Ruſticks to a farther improvement of this part of Huſbandry, not only becauſe the products of their labours have often found a good Market for curious Pallats, but becauſe they have been frugal meats for their own Families, and ſometimes neceſſity alſo (which often makes men ingenious) hath put them upon the propagation of theſe Eſculents, which have ſerved as Meat, Bread and Drink, in ſuch years that Corn hath been ſcarce. For in a great part of the World, the Inhabitants never were acquainted with the making of Bread of Corn, but ſometimes of the Roots of ſome Plants that grew amongſt them, which they eat with their hunted Veniſon, or with their Milk, as in *Ireland* they eat *Potatoes*;

tatoes; thus here in *England*, *Carrots*, *Turnips*, *Cabages*, and many other Roots and Plants have been both Bread and Meat for the Husbandman and his Family, who have in many places ſubſiſted long on this Food; and theſe Eſculents being of themſelves of a fine nutrimental and moiſt nature, have not required ſo much Drink as other Meats more dry and ſalt uſually do; theſe kind of Diets are at a far leſs charge and trouble to the *Pater-familiæ*, than thoſe of *Fleſh*, *Bread*, *Cheeſe*, &c.

And if the Caſe were truly ſtated, and the Times compared, the improvement and propagation of theſe Eſculents hath been one principal cauſe of the deadneſs of the Market for Corn, which probably may be objected againſt this deſign.

To anſwer which you may conſider, that cheap Food is one of the greateſt encouragements for the peopling of a Country, for this very reaſon many thouſands have deſerted *England*, to ſettle in *Ireland* and elſewhere, to our great detriment and their great advantage.

If any Farmer complain of the effects of theſe Improvements, then let him make uſe of the ſame, and ſet out yearly a parcel of his Farm, for the raiſing of Garden-

tillage,

tillage, wherewith to feed his own Family and furniſh the Market.

Then will it be objected, that in caſe every man ſhould ſo improve a part of his Ville, the prices of the tillage would be low, and it would not quit the coſt.

To anſwer which, It would then reduce the advantage of the one and the other part of Huſbandry to a Ballance, from which no ill effect as to the general can proceed.

It may be further objected, that ſeeing leſs Land will, by theſe ways of improvement, feed a certain number of people, than the old way of Huſbandry can do, that much Land will therefore lie waſte.

In anſwer whereunto, If you can raiſe as much Food on an acre of Land as formerly you did on four acres, what diſadvantage to you is it in caſe the three remaining acres lie waſte? but you may convert them to paſture if you pleaſe.

In caſe you object, that Garden-tillage requires more hands to *dig*, *trench*, *ſet*, *ſowe*, *plant*, *weed* and *gather in*, than the former way of ſowing of Corn.

Anſwer, This is one of the Advantages it will neceſſarily produce, that a man and his Family may live and keep themſelves

ſelves daily employed in this method of Huſbandry on a few acres of Land to as equal an advantage,as by the more ancient way they could on a great Farm : For it were much better for the publick, that the great Farms were ſubdivided into leſſer, that the people might have Habitations and Employments here at home to keep them from ſtragling abroad,than to have ſo many great Farms lie ſo neglected, to the great prejudice of the Commonweal : *Palladius* was of the ſame opinion who ſaid, *Fœcundior eſt culta Exiguitas, quam magnitudo neglecta.*

But if you will ſay, that by multiplying Garden-tillage after this manner, it will make Corn-land ſo low rented, and Corn thereby to become cheap, to the great detriment to the Kingdom in general. Then conſider, that if a part of our Land will yield us Food ſufficient, and uphold the yearly value of our Villes, as by this Method it will certainly do, then may there be Corn enough raiſed in *England*, not only to ballance but under-ſell our foreign Neighbours, to our great advantage and their detriment (which is almoſt equal to it;) for the more of our own Growths we can vend, the more is Navigation encouraged,

ged, and the greater Returns are made. It is when the Growths or Manufactures of other Countries are imported hither, and in lieu of them ready money returned, that impoveriſhes us and enricheth them. Therefore when the contrary is done, it muſt have a contrary effect.

The private Advantages of the propagating *Hortulans* or eſculent Plants, as they are oftentimes repreſented, are prodigious and incredible, therefore a modeſt computation is the beſt encouragement; for any rational man will more eaſily believe that an acre of *Turnips*, *Carrots*, *Onions*, or the like, is four or five times more profitable to the Huſbandman than an acre of Wheat or Barley, or ſuch like, than if it ſhould be ſaid to be ten or twenty times more profitable.

But for your *Garden* (where you are confined to a leſs room than a Farm) which is divided into ſeveral ſquares or quarters, and each ſquare or quarter well manured and prepared for its proper tillage, there may you expect a far greater encreaſe, eſpecially of ſuch Plants that annually produce their fruit without the renewing of the Gardeners coſt and pains, unleſs only to cheriſh and preſerve them, with the planting

ing and propagating of which ſort of Eſculents we will begin.

CHAP. I.

Of ſuch Plants that are perennial, or continue over the Year.

THE beſt and moſt ſelect of ſuch Eſculent Plants that continue from Year to Year, without new planting or ſowing, is the *Aſparagus*, which deſerves to be firſt named, becauſe of its early and plentiful encreaſe it yields, the delicacy of its meat, and the continuance of it before any other, gains a repute above it. *Of Aſparagus.*

So long ſince as in *Pliny*'s time it was the moſt eſteem'd of any in the *Garden*, although in thoſe parts they ſometime grew wild, yet in the Gardens were they ſo cultivated, that three of their Buds or Heads would weigh a pound, and were (though common) the *Romans* dainty diſh: And *Cato* many Years before *Pliny*, wrote

wrote very much concerning their propagation, out of the abundant regard he had for them, being then but newly reduced to the Gardeners care.

They grow naturally wild, or at leaſt ſome baſtard kind of them in the Meadows near *Briſtol*; but our more fair and large, uſually called *Dutch Aſparagus*, are propagated from ſeed; the ground wherein you ſowe them muſt be rich and well tempered and prepared, then may you with your finger prick in the berries at what diſtance you pleaſe: the beſt time is in *January* or *February*.

Then after two years, in *March* following, will they be fit to remove into the bed wherein they are to remain.

But the beſt and moſt expeditious way is, to buy your Plants of two or three years growth of the Gardeners, who raiſe them on purpoſe for ſale at an eaſie price.

The Bed you plant them in ought to be three or four foot wide, and about two foot in depth, the moſt part within the ſurface of the Earth, and about ſix inches above, for it will ſettle. When you have made clean and ſquare your Foſs, you may fill it with good rotten dung of any ſort,

ſort, with a little mixture of Earth, the beſt ſoyl is that which the Butchers make, wherein there are Hoofs, Rams-horns, or any ſuch cornuous ſubſtance, wherein they exceedingly delight; it's probable woollen rags or old leather may do as well; with theſe mixtures may you fill your Bed about eighteen inches, then cover the ſame with good old rich Mould that came out of ſome Cucumber or Melon bed for about ſix inches more, in the midſt whereof plant your Sets, at ſixteen or eighteen inches diſtance in a *Quincuncial* order, that they may lie covered two or three inches; plant them with their roots ſpreading as much as you can.

You may make as many of theſe Beds and as long as you pleaſe, leaving a two foot interval between them, for the conveniency of dreſſing and cutting them, for broad beds are inconvenient, no tillage ſuffering more by treading than theſe.

About three Years after they are planted may you cut of them: the ſooner you cut of them the more will the head of the Root knit, and the more in number will it Yearly yield you, and the later you cut,

cut, the more will the Root and head grow in bigneſs, and the fairer buds will you have. Some will thus grow to be very large.

When *Green Peaſe* furniſh your Table, then may you let your *Aſparagus* run to ſeed, that they may gather ſtrength for the ſucceeding year.

In the cutting the Buds remove ſome of the Earth with your Knife, to avoid injuring the next Succeſſor.

In *November* or the beginning of *December* cut the ſeedy ſtalks cloſe to the ground, and cover the Beds with new warm Horſe-dung, which will prevent them from extream Froſts, for no other will injure them.

In the beginning of *March* uncover them if the weather be open, and either before you cover them or at this time weed them clean, and after weeding lay on your Bed the bottom of a *Melon* or *Cucumber*-bed, or ſuch like rich Earth, about two fingers thick, to ſupply the uſual decay they are ſubject unto.

You may have early *Aſparagus*, if you take the old Roots with the Earth about them, and place them on a hot Bed, thus will they bud in *January*.

By

By the precedent Rules will a Garden of *Asparagus* furniſh you with buds near three months of the year, without the force of a hot Bed, and that in ſuch plenty that no other Tillage whatever that is perennial (the *Artichoke* only excepted) affords the like. Theſe whileſt leſs common were received as dainties at the beſt furniſht Tables; and now, though plentiful, are they an uſual diſh at moſt Gentlemens Tables, and by degrees may come to be a more vulgar diet; for after their firſt planting, the labour about them is but ſmall, and the coſt leſs, the trouble of cutting them not ſo great as gathering of Peaſe, nor dreſſing them ſo tedious, yet a meat equalling the beſt of Tillage, and the moſt ſalubrious of any.

Of Artichoaks.

About the time the *Asparagus* leaves you, the *Artichoak* comes in requeſt, being one of the beſt of a Gardens products, and anciently derived from *Thiſtles*, as *Pliny* tells us, and in his time and long before had been ſo improved, that they became a moſt delicate meat, and were ſerved up to the Tables of the moſt prodigal *Romans*. If then they were ſo excellent, ſurely by a continued improvement to this day, muſt they needs now be much better.

There are ſeveral kinds of them, as the more ordinary which run up tall, and bear ſmall heads which are very hardy; the other ſorts are more large, and grow low, and much to be preferred, but are more tender and unable to endure the ſeverity of the Winter.

They are increaſed by Slips, taken from the ſides of the old Roots at the time of dreſſing them in the Spring, with as much root to them as you can.

Artichoaks delight in a rich and deep ſoyl, and not very dry, which ſoil muſt be trenched about two foot deep, and mixt very well with good old rotten dung, and ſo laid up into beds of what form you think beſt, for you may go between them as you pleaſe; the *Artichoak* roots very deep, and if it likes its ground will grow very large, and continue many Years.

You may plant them four foot apart at leaſt, that they may have room to ſpread their leaves, and at their firſt planting be ſure to water them in dry weather until you obſerve them to grow.

The beſt times for the planting them is in the beginning of *April*, and you may ſowe any Sallet Herbs between them, that may be gathered and diſpoſed of

of before the *Artichoaks* ſpread too far. Theſe Plants will ſome of them yield heads in the Autumn following.

If you throughly water your *Artichoaks* with Water enriched with Sheeps dung, it will make them very large: watring of them in dry Land or in dry Years much advantageth them, for in moiſt Years they are much more plentiful and large than in dry Years, and the better it will be in caſe the Water be fat.

Water drawn from Aſhes or improved by any fixed Salt is very good for the ſame purpoſe; for I have known that *Artichoaks* have been the larger for Turf aſhes, caſually with dung laid at their Roots to preſerve them in Winter.

In *November*, or the beginning of *December*, it will be a good time to ſecure your *Artichoaks* from the Froſt, by raiſing the Earth about them, and encompaſſing them with long dung or any hawmy ſubſtance, but not to cover them, leſt it periſh them, for it's the Froſt that periſheth the Roots, and the wet and want of Air that periſh the Leaves.

Some preſcribe to whelm over them an earthen Pot, Bee-hive, or ſuch like, open at the top to give them Air, which may ſerve if the Winter be not too ſharp. About

About the middle of *March*, you may gently move the dung from them, and at the end, the Earth that was caſt up, and the firſt week in *April* may you dreſs them, by digging deeply about each Root, and ſlipping of every Set as low as poſſibly you can, leaving two or three of the greateſt and moſt diſtant the one from the other for Bearers, then fill them up round with good old dung or rich ſoil mixt with the earth, and they will afford you fair heads.

If you would have latter *Artichoaks*, you muſt cut the firſt crops betimes, or expect them from your new ſet Plants.

A ſmall ſpot of ground thus planted and ordered, will furniſh your Table with many of theſe Fruits in a Year, and are equal to the beſt of Vegetables for food, charge and trouble are very little in compariſon of the advantage.

They will continue ſix, eight, or ten Years, according to the goodneſs of the Land they grow in, and then muſt be renewed when you perceive them to degenerate, which they ſurely do if they like not their ground.

The young buds of *Artichoaks* may be eaten raw with Pepper and Salt, as uſually *Melons*, *Figs*, &c. are eaten.

The

The *Chard* of the *Artichoaks*, which is the ſtalk of a young *Artichoak*, an ariſing out of old root, and preſerved from the Air and from heading, by winding of it about with a Straw, to blanch it and make it tender, is by the *French* eſteem'd an excellent diſh.

The Roots, Stalks, and Leaves of them, whilſt young and tender, are delicate meat, eſpecially if ſo preſerved and blanched as is by ſome affirmed; and it is not improbable, for I have often found that by covering a winter bud to preſerve it from Froſt, the Snails have greedily devour'd it.

Thoſe eſculent Herbs that are perennial, becauſe they are not ſo much uſed for Food as for Condiment, I ſhall diſcourſe of in another Chapter.

CHAP. II.

Of Eſculent Roots.

THere are ſeveral Roots that have afforded us great plenty of ſubſtantial, pleaſant and wholeſom Food, whereof the *Turnip* is eſteem'd the beſt; there are ſeveral ſorts of them, the *Of Turnips.*

round, long, and yellow, of which the round is the moſt common, though the others are very good; the long are uſually called *Navews*; they have been an ancient Food throughout *Europe* Southward, and have been very much improved in *England* of late Years.

They will grow on the meaneſt Land in its firſt tilth, and much the more if the Seaſon prove moiſt or dripping. The ſeaſon of ſowing them is about *Midſummer*, that they may be ready to improve upon the *Autumnal Rains*, which maketh them much ſweeter than the *Vernal*.

They are fickle at their firſt coming up in a too dry ſeaſon, and if (being ſown early) they happen to fail, you may at the end of *July* or beginning of *Auguſt* new ſowe your ground.

You may ſowe them in *April*, to have Turnips in the Summer, but ſown after for the Winter is moſt ſeaſonable.

In the Winter before the great Froſts prevent, you may take them up, and cutting off the greens, diſpoſe of them in ſome cool place on heaps and they will keep long, and much better and longer in caſe they be laid in Sand and covered with it.

They will root the better and larger if the

the Leaves ſpread and grow flat, than if they ſtand upright or grow upwards; which to prevent, ſowe them not too thick, or if they come up too thick in any place, reduce them to a convenient number or diſtance of about ten or twelve inches, and ſupply the defects by tranſplantation, and you will find that the increaſe of your Root ſhall ballance the leſſening your number, for the near ſtanding of any vegetables cauſe them to aſpire upwards, as is evident in moſt ſpreading Trees planted in Copſes.

But if the over fatneſs of your Ground, which is a great fault for *Turnips*, or over-much wet cauſe them to run out in leaf more than in root, then treading down the Leaves will make them root the better.

The Greens or Leaves of *Turnips* that have been ſown late and lived over the Winter, are uſually boyled and eaten with ſalt Meats, and prove an excellent Condiment.

Thus ordered, will a ſmall ſpot of Ground yield you a ſecond Crop (after *Peaſe*, *Beans*, or *Sallet-Herbs*) of excellent food, which the moſt curious Palates diſdain not, and much more in value than any of Corn or Grain whatever.

Carrots have been anciently uſed for Meat, *Of Carrots.*

Meat, but not ſo much as *Turnips* have been, yet are they the ſweeter meat, and more eaſily eaten without bread, or rather better ſerve to ſupply that defect than *Turnips*, for *Turnips* are much the better Condiment, but *Carrots* the pleaſanter Food.

There are two ſorts of them, the yellow, and the Orange or more red: the laſt of which is by much the better.

They delight in light Ground with a mixture of Sand; if it be rich or heavy, you muſt take the more pains in digging it, to make it as light as you can.

If you dung your Land the ſame year you ſowe your *Carrots*, you muſt be ſure to bury your dung ſo low that the roots may not extend to it, for as ſoon as they touch the dung they grow forked.

The ſeaſon for ſowing them is in *February* or *March*, in dry weather.

To make them large, you muſt do with them as with the *Turnips*, only they will admit of a greater number on the ſame quantity of ground than the other.

If ſown between *Beans* ſet in wide rows, after the *Beans* are taken up your *Carrots* will thrive, and you may have a ſecond Crop, but theſe not ſo fair nor early as thoſe that are ſown in Beds by themſelves.

To

To improve this and other Roots, gather your Seeds from the higheſt aſpiring Branches, and ſowe them as before is directed; then when you take them up, ſelect the faireſt and preſerve for ſeed the next year, then plant them, and take the Seeds from the higheſt tops as before.

Carrots are preſerved as *Turnips*, over the Winter; but if you will have *Carrots* early in the Spring, you muſt ſowe them in *Auguſt*, and preſerve them from the Froſt in the Winter by covering them with Peaſe-haum.

Next unto *Carrots* are *Parſnips* in great uſe for a delicate ſweet food, and were ſo eſteem'd in *Pliny*'s time, and by him reputed to be excitatives unto *Venus*; an Argument that they are very nutrimental. *Parſnips.*

They delight in a richer Soil than the *Carrots*, but as light and well ſtirr'd as may be, elſe in every reſpect to be ordered as the *Carrots*, but are not to ſtand ſo thick.

The *Skirret* or *Skirwort* root was alſo a very ancient diſh amongſt the *Romans*, and is the ſweeteſt, whiteſt, and moſt pleaſant of Roots, and by Phyſicians eſteemed a great reſtorative, and good for weak Stomachs, and an effectual Friend to Dame *Venus*. *Of Skirrets*

Skir-

Skirrets delight in a very rich, light and not too dry Soil, for in moiſt Summers they are faireſt.

They are encreaſed by Plants divided in *February* or *March*, and ſet in ſingle buds at ſix or eight inches diſtance, and in a dripping year, or otherwiſe, if they be watred in dry ſeaſons, you will have a very plentiful encreaſe the ſucceeding Winter; you may alſo plant them here and there on the edges of your other Beds.

They endure the Winter very well, and you may take them up at any time before the Spring be too forward, if the Froſts prevent you not; when you take the Roots, cover the tops in Earth for your farther encreaſe.

Of Scorſonera. The Root *Scorſonera* is as yet not common, but very much commended by ſome to be good meat, after the outer rind is ſcraped off, and the root ſteep'd a while in water to take away that little bitterneſs it hath.

They are ſaid to lie in the ground all the Winter, and from year to year without any prejudice, but will ſtill grow bigger and bigger, although they yearly run up to ſeed.

They are encreaſed either by Seed, or by

by Slips, as the *Skirrets*; or by cutting the Roots in ſeveral pieces, which planted in good ground at about eight or nine inches diſtance in *March*, will yield a conſiderable increaſe, or may be planted at any other time, they being hardy.

They are eſteem'd to be very cordial and excellent in Feavers.

Potato's are much uſed in *Ireland* and in *America* as Bread, and are of themſelves alſo an uſual food. *Of Potato's.*

They grow in any good mellow ground, and are encreaſed by cutting the Roots in pieces, and planting them as the *Scorſonera.*

Theſe and the *Jeruſalem Artichoaks*, which are by much the meaner food although ſomewhat like them, may be propagated with advantage to poor people, a little ground yielding a very great quantity, as the many ſmall Welſh Territories adjoyning to the Highways in theſe parts, planted with them plainly demonſtrate. *Of Jeruſalem Artichoaks.*

The *Red Beet* or *Roman Parſnip*, and the *White Beet* were amongſt the ancient *Romans*, and by ſeveral are now uſed as well in root as in leaf at the Table. *Of Beets.*

Beets delight in a rich and deep Soil as doth

doth the *Parſnip*, and muſt be ſown about the ſame time, or rather ſet at about fifteen inches aſunder, becauſe their leaves are large.

Or you may ſowe them in a Bed promiſcuouſly, and when they are grown a little then tranſplant them, and they will yield fairer roots, the other being apt to be forked.

There are *Chards* of *Beets* as well as of *Artichoaks*, and after the ſame manner may be prepared.

You muſt take them up before the Froſt prevent you, and houſe them as before was directed for *Turnips* and *Carrots*.

After the ſame manner plant the beſt for Seed as was directed for *Turnips* and *Carrots*.

Of Radiſhes *Radiſhes* in the more Southern Countries are a delicate meat, eſpecially if ſown in brackiſh Lands, or watred with brackiſh Waters, and therefore were they in ſuch eſteem with the *Egyptians*, where were the daintieſt and ſweeteſt *Radiſhes* in the World.

The *Greeks* alſo ſo highly preferr'd them to all other meats, in regard of their good nouriſhment, that in an Oblation of Garden-fruits unto *Apollo* in his Temple at *Del-*

Delphos, they dedicated the *Beet* in Silver, the *Turnip* in Lead, but the *Radiſh* in beaten Gold: Alſo *Moſchian* the Greek Writer had ſo great an eſteem for the *Radiſh*, that he compiled a whole Book of it, as *Pliny* relates.

Theſe in our more Northern Clime attain not to that degree of maturity, as to become food, except it be the leaves, which boyled are eaten with ſalt meats.

But are very much regarded as a *Sallade* for their biting and quick taſte, eſpecially in the Spring, eaten with Salt.

There are three ſorts of *Radiſhes*, the ſmall eating *Radiſh*, the *Horſe Radiſh*, and the black *Radiſh*.

The firſt is that which hath been ſo much in repute, and is now ordinarily eaten, and is raiſed of Seed.

To have them early they muſt be raiſed on a hot Bed, with a ſufficient thickneſs of good rich light Mold, that they may have depth enough to root in before they reach the dung.

To have large and clean *Radiſhes*, make holes as deep as your finger about three inches diſtant, into each hole drop a ſound Seed (or two if ſuſpicious) and cover the Seeds a little, leaving the reſt of the hole

hole open; thus will they grow to the height of the hole ere they dilate their leaves, and yield you a long and tranſparent root.

You may ſowe them all the year, thoſe in the Winter in hot Beds, thoſe ſown after *Midſummer* will not run to ſeed that year.

They delight in rich and light ground, and require watring, for in dripping years they prove faireſt.

Horſe Radiſhes. The *Horſe Radiſh* is increaſed by Plants as well as from Seeds, and uſed by many as an excellent and wholeſom ſawce.

Black Radiſh. The black *Radiſh* is ſo mean a Root that it finds no place in a good Garden.

Onions are an ancient food, eſpecially of the *Egyptians*, and are much eſteem'd of by the *Spaniards*, who eat them as *Engliſh* men do Apples, for in the hotter Countries they are a little milder than here.

There are ſeveral ſorts of them, the red the moſt tart, and the white the mildeſt; the ordinary *Engliſh* are not ſo fair as thoſe of *Biſcay* or St. *Omers*, but theſe by often ſowing degenerate.

Of Onions. Sowe *Onions* in *February*, or beginning of *March*, between the full of the Moon and

and the laſt quarter, and they will head very well, and not run to *Chibols*.

They delight in good Land well tempered and freed from Weeds, they extend not their fibres far downwards, therefore in your ſowing them tread your bed or beat it flat, then ſowe it with your ſeed as equally diſperſed as you can, and not too thick, then ſift over it fine rich Earth a finger thick at moſt; by this means the root will grow larger, and not be apt to run into the ground, for an *Onion* and a *Turnip*, the more on the ſurface they grow, the fairer they prove: This I had from an experienced perſon.

Onions ſown with Salt are ſaid to proſper and grow large; it is not improbable, becauſe they ſeem to extract much of the brackiſh moiſture of the Earth.

You may ſowe *Onions* all the Year for the uſe of the young *Onions* or *Scallions*; thoſe ſown in Autumn may be covered with Straw or Peaſe-haum, and ſo preſerv'd all the Winter, and will be early *Chibols* or *Scallions* in the Spring.

You may plant ſmall *Onions*, or ſuch that are grown or beginning to ſhoot in the Spring, in deep holes, and they will prove good *Chibols*.

There

There is a distinct species of *Chibols* or *Ascalonian Onions* in *France*, that are encreased by Off-sets, as the *Eschalots*, but they are not usual with us.

The use of *Onions* is generally known, and the advantage they bring to the careful Gardener very great.

Of Garlick. The use of *Garlick* is as ancient as that of *Onions* with the *Ægyptians*, who had them both in very great esteem, as now our *Welsh* have *Leeks*, and used to swear by *Garlick* and *Onions*, deeming them sacred, because they afforded them so much rare food, much after the same manner do our ancient *Britains* dedicate the *Leek* to their Saint *David* on his day, and *Ægyptian* like, some of them are known by their Magazin of *Garlick-fume* at a great distance.

Garlick is planted by Off-sets in *February* or *March* in good rich Soil, and it will encrease wonderfully. About the end of *June* you must tie the leaves in knots, which will make them head, and prevent their spindling: it may be taken up in *August* when the blade withereth.

Much of it is eaten in *Wales* and *Scotland*, and some parts of *England*, and much more of it would be spent for its wholsome

ſomeneſs, were it not for the offenſive ſmell it gives to the by-Standers, which is taken away by eating of a *Beet-root* roſted in the Embers, as *Menander* (a Greek Writer quoted by *Pliny*) ſaith.

Eſchalots are now from *France* become an *Engliſh* Condiment, and are increaſed and managed near after the ſame manner as the Garlick, only they are to be ſet earlier becauſe they ſpring ſooner, and taken up as ſoon as the leaves begin to wither, which is before the Garlick. They muſt not lie in the ground long after, for either they rot in the ground or the Winter kills them. *Of Eſchalots.*

They give a fine reliſh to moſt Sawces, and the breath of thoſe that feed on them is not offenſive to others, as it is of thoſe that feed on *Garlick* or *Onions*: they are apt to degenerate being planted two or three Years in the ſame ground, therefore it is beſt to renew your Plantation with new Plants lately brought from *France*, within two or three Years.

Leeks were in uſe as anciently as *Onions* or *Garlick*, not only in foreign parts but here in *Britain*, as is evident by the conſtant uſe of them by the *Welſh*, who propagate an abundance of them, inſomuch *Of Leeks.*

that I have ſeen the greateſt part of a Garden there ſtored with *Leeks*, and part of the remainder with *Onions* and *Garlick*.

By reaſon of their mild nature they are much uſed in *Pottage*, which hath derived its name from *Porrum* a *Leek*, though now from the *French* we call it *Pottage*.

They are raiſed of Seeds as the *Onions*, and ſown about the ſame time.

About *Auguſt* plant your *Leeks* in very fat rich ground, and make the holes deep with a ſetting Stick, wherein plant them, but fill not the hole with Earth; water them once in two days with water enriched with fat dung, and they will be very large and white.

Plant the beſt for Seed as you do the *Onions*; and the ſeed-bearing ſtalks of both muſt be ſupported by ſticks and threds, elſe they will lean to the ground.

Of Sives. *Sives* being a diminutive kind of *Leek*, is next to be mentioned; they are increaſed by parting them and planting them in ſingle heads early in the Spring, if planted in good Land, they will multiply exceedingly, they ſtand many Years, and are a pleaſant Sawce and good Pot-herb.

CHAP.

CHAP. III.

Of Beans and Peaſe.

Garden Beans are an ancient Food eſteem'd by *Pliny* the principal of all Pulſe, they are a very ſtrong and nouriſhing meat. *Pythagoras* forbid his Scholars the eating of *Beans*, only (as is ſuppoſed) becauſe they were a rough meat, and diſturbed their ſedate minds in the night, and are not therefore ſo good for Philoſophers nor Students. The greater ſort which we vulgarly call *Sandwich Beans*, are by much to be preferr'd for their fruitfulneſs and goodneſs.

They may be ſet in *November* and at any time after till *May*, but moſt ſecurely in *February* or *March*, for if they begin to ſpire, and very ſevere Froſts happen after it, they may be all deſtroyed. *Probatum eſt.*

It is not good to ſet them promiſcuouſly but in double ranges, at three foot diſtance at leaſt, the ranges running from North to South, the Sun will comfort and ripen them the better.

If you cut off the Stalks of your Beans near the ground when they are firſt ripe, the Roots will ſpring again, and in ſeaſonable Years you may have a ſecond Crop about *Michaelmas*.

From whence we may conclude, that if you cut off your Beans that are ſet in the Spring, at ſuch times as they begin to blow, then they will germinate again into more Branches and bear late, much better than if they were planted late, which extream drowth uſually hinders from coming to perfection.

Of Kidney Beans.

Kidney Beans were as ancient a Food as the other, and in very great eſteem with the old *Italians*, yet within the memory of Man were a great rarity here in *England*, although now a known and common delicate food.

They delight in a warm, light and fertile ground, which being well ſtirr'd, and about *May* day or very little ſooner planted with the *Kidney Beans*, at about a foot apart and two fingers deep, will yield you an extraordinary Crop.

You may either ſet tall Sticks near for them to twine about, or let them lie on the ground, but if you are ſtraitned in room, thoſe on Sticks will yield you the greateſt encreaſe.

Of

Of theſe there are four ſorts: 1. The *Scarlet Bean*, which yieldeth a rough husk, and is not the beſt to eat in the ſhell as *Kidney Beans* uſually are eaten, but is reputed the beſt to be eaten in the Winter when dry and boyled. 2. The *Painted* or *Streaked Bean*, which is the hardieſt although the meaneſt of all, and is known, the dry Bean being all over ſtreaked with a dark colour. 3. The large *White Bean*, which yields a fair and delicate Pod. 4. The ſmall *White Bean*, which except in ſize is like the latter, but eſteem'd the ſweeter.

There is another ſort much like the laſt, that is natural to the Iſland *Bona Viſta*, and thence taken and propagated in the Summer Iſlands, from whence ſome certain perſons have them dry, and eſteem them as delicate meat; they will flouriſh well here in branch, but our Summers are not long enough to bring them to maturity, *Quære*, if raiſed on a hot Bed. *Bona Viſta's.*

Peaſe are of divers kinds, and ſome of them the ſweeteſt and moſt pleaſant of all Pulſes; the meaner ſort of them have been long acquainted with our *Engliſh* Air and Soil, but the ſweet and delicate ſorts of them have been introduced into our *Of Peaſe.*

Gardens only in this latter Age, ſuch as the *Hot-ſpurs*, the moſt early, pleaſant and profitable of all others. The *Sugar Peaſe* with crooked Cods, the ſweeteſt of all. The *large white* and *green Haſting*, and the great *ſweet Peaſe*, which only we ſhall adviſe to be propagated in our Gardens. The other, which are many more, being already ſufficiently known, we leave for a larger extent of ground than our narrow Garden.

The *Hot-ſpurs* are the ſpeedieſt of growth of any, that being ſown about the middle of *May* will in ſix weeks time return dry again into your hands, no Vegetable beſides being ſo quick in its growth and maturity; therefore let theſe be the firſt that you ſowe; if ſown in *February* or *March*, they will come earlier than any other ſort ſown before Winter; but if you ſowe them in *September*, and can by Fences of Reed or otherwiſe defend them from extream Froſts, you may have ripe Peaſcods in *May* following.

The *Sugar Peaſe* (which many take to be a fair white ſweet *Peaſe* ſucceeding the *Hot-ſpur*, but erroneouſly) is a tender *Peaſe* planted in *April*, and ripe after *Midſummer*, the Cods are very crooked and ill ſhaped,

ſhaped, which being boyl'd with the unripe *Peaſe* in them are extraordinary ſweet. The greateſt diſcouragement in raiſing theſe, is that their ſweetneſs attracts the ſmall Birds unto them to their total deſtruction, unleſs carefully prevented, which is a ſufficient Argument of their pre-excellency.

The large *white* and *green Haſting* are tender, and not to be ſet till the cold is over, and then not very thick, for they ſpread much and mount high, and therefore require the aid of tall ſticks, every one knows the worth of them.

There is another very large grey, but extraordinary ſweet *Peaſe*, that is lately propagated, it is tender but very fruitful, and deſerves a large Bed in your Kitchin Garden.

They delight in a warm light ſoil, if it be rich the *Peaſe* are the fairer, if lean the *Peaſe* are the more early, and ſpend better, eſpecially when dry.

They are ſet with a Dibble to more advantage than ſown in Rills or Furrows, but either way ſhould be by a line, and the rows eighteen inches or two foot apart, as the ground is in goodneſs, that you may go between them to haw, weed, or gather them.

If you keep the ground between them bare, they will ripen the ſooner, for the heat of the ground will contribute much thereto.

If you raiſe the Earth about them when they are about a hand breadth high, they will flouriſh the better.

If you ſet or ſowe them in the beginning of or before Winter, you muſt inter twice as many *Peaſe* as you need to do in caſe you ſtay till *February* or *March*, becauſe the cold and Mice will deſtroy a part.

Ground laid in deep Furrows from Eaſt to Weſt, and *Peaſe* ſown or ſet on the South declining ſide of each Furrow, will defend your *Peaſe* better in the Winter, than if they were ſown or ſet on a level. For on the *Wiltſhire* Plains, the Huſbandmen leave their Land after it is ſown with Wheat, as rough and clotty as they can, to ſhelter their Corn in Graſs from the ſeverity of the cold Winds in the Winter.

Peaſe on Sticks will bear more, but on the ground will ripen ſooner.

CHAP. IV.

Of Cabbages and Caulyflowers.

THere is not a more ancient nor common Eſculent Plant than a *Cabbage* or *Caulwort*, nor any Garden Aliment ſo wholeſom, if *Cato* that lived near two thouſand years ſince, and *Chryſippus* and *Dieuches* two famous Phyſicians more ancient, (that wrote each of them a Volume of the excellent Vertues of this Plant) may be credited, or the Country wherein they wrote conſidered. *Pythagoras* himſelf, long before *Cato*, had not ſo mean an opinion of *Beans*, but he had as high of this. Ever ſince thoſe Times we have had the conſent and approbation of all our *Europæan* Territories (except the more ſevere Northern) that *Cabbages* and *Caulworts* are a good and wholeſom Food, as their conſtant and vulgar uſe of them in every place ſufficiently manifeſt. Here in *England* not a Village without them; and if there be a Houſe without a Garden, or a Garden without a *Caulwort*, yet the Inhabitants *Cabbages.*

or

or Owners of them will furniſh themſelves from the Market: yet are they not ſo addicted to the uſe of them here as in *France*, *Holland*, *Germany*, &c. where (in *Germamany*) that famous City of *Wurtsburgh* is ſaid to derive its name from the great plenty of *Wurts*, as they call them, that grow about it.

We have here many ſorts of them beſides the common which are known to every one, as the *Dutch Cabbage*, the large ſided *Cabbage*, the white-headed *Cabbage*, the red *Cabbage*, perfum'd *Cabbage*, *Savoy Cabbage*, and *Ruſſia Cabbage*.

The Dutch Cabbage. The firſt that heads is a ſmall white *Cabbage*, called the *Dutch Cabbage*, and comes in ſeaſon before the common *Engliſh Cabbage*, and is very ſweet, notwithſtanding it hath not felt the froſt, which is a great improver of the taſt of moſt *Cabbage*.

The large-ſided Cabbage. The *Cabbage* that is now much in requeſt is the *large-ſided Cabbage*, it's a very tender Plant, ſown not till *May*, planted out in *July*, and in the *Autumn* is eaten as the beſt *Cabbage* in the World.

The white-headed Cabbage. The large *white-headed Cabbage*, which is the biggeſt of all *Cabbages*, is worthy your care for its greatneſs ſake.

There

There is a ſort of red *Cabbage*, and another inclining to purple; they are ſmall and grow near the ground, and are planted only for variety ſake, and to garniſh diſhes, *&c.* *The red Cabbage.*

There are ſome ſort that have a Musky ſcent, and are therefore called perfum'd Cabbages, which are not unworthy your care. *Perfum'd Cabbage.*

But one of the beſt ſorts of all is the *Savoy Cabbage*, almoſt as hardy as our common Engliſh Cabbage, the Winter Plants head very well, being planted out in the Spring, as the ordinary Cabbages are, the heads when the Froſts have touched them turn yellow, and then are delicate meat. *The Savoy Cabbage.*

Theſe that are raiſed of Seed in the Spring will have but ſmall heads, which, as alſo thoſe without heads in the ſucceeding Winter, are exceeding any ordinary *Caul* or *Cabbage.*

The *Ruſſia* Cabbage is the leaſt and moſt humble of all the Cabbages, growing very near the ground; is very pleaſant food, hardy and quick of growth: So that you need not be without all the Summer. The Winter Plants heading early and the Spring Plants arriving to maturity in ſeven weeks after they are ſown. *The Ruſſia Cabbage.*

Sow

Sow all your *Cabbage* ſeeds that you intend for Winter Plants in *Auguſt* or beginning of *September*, and when they are grown with leaves about three fingers broad, then draw them and plant them out in freſh and rich land where they may remain all the Winter, and at Spring replant them where they are to ſtand for Cabbages. Theſe are thoſe they call Leger Plants that produce the faireſt Cabbages.

You may ſow your ſeeds in the Spring in *March* and *April* for *Cauls* for the whole Summer; and ſome of them, if the Year prove dripping, or they ſometimes watred, will head.

At the tranſplanting your young Plants, water them with your water that is enriched with dung.

Before the great Froſts ſurpriſe you, you may take up your hardeſt Cabbages, and after they have hung up by their roots about a fortnight to drain the water from them, you may either lay them in ſome Cellar, where they will keep a long time, or plant them deep in the ground cloſe one to another, and cover them with Hawm or Straw until you have occaſion to uſe them.

Thoſe you intend for ſeed you may plant

plant in rich ſoil indifferent deep, and cover them from the Froſts, and in the Spring they will quickly aſpire.

Beſides theſe variety of *Cabbages*, *Caul*, and Sprouts ſpringing from the old decapitated ſtumps, there is a perennial *Caul* that will continually yield you a green Meſs when ever you have occaſion, and deſerves a place in your Kitchin Garden, and is raiſed of ſeed as the other.

Several of theſe curious Cabbages I received from Mr. *Richard Ball* Gardener in *Brainford*.

There is a Species of *Cauls* much more excellent than any of the former which are *Cauliflowers*, which merit a far greater eſteem at the Table than the *Cabbage*, for a time, their prime Seaſon laſts not above two Months. But afterwards the *Cabbage* becomes a better diſh, which is welcome to any mans Table ſix Months together, and the *Sprouts* and green *Caul* all the reſidue of the year. *Of Cauly Flowers.*

Their Seeds are ſown in *Auguſt* or *September* on Beds where they may be defended all the Winter by Mats or other cloſe ſhelter to preſerve them from Froſts.

In the Spring about the end of *March* it is a good time to plant them out in Plants where

where they ſhould ſtand, which in a dripping Spring or by diligent watring will yield you fair Flowers, but if they are not watred they will bring forth ragged and divided Flowers.

You may ſowe their Seed in *February* on a hot Bed, and have Flowers within a Month after thoſe that were ſown before Winter.

Thoſe that are of one growth uſually flower about a time, which to prevent, you may remove ſome of your Plants once every fortnight, for two, three, or four times, as you think good, which will keep them back from flowring, and ſo you may have them one after another as you pleaſe: Or you may cut off your Flower before it be fully ripe with a long ſtalk, and ſet it in the ground as far as you can, and it will retain its ripening, but you muſt ſhade it, and give it a little Water, leſt it wither.

CHAP.

CHAP. V.

Of Melons, Cucumbers, &c.

MElons or *Muskmelons*, as they are usually termed from their pleasant Scent, are in the more Southern Countries not unworthily esteem'd the most delicate fruit the *Kitchin Garden* affords, for in those warmer Airs they attain a greater degree of Maturity, which exceedingly adds to their Gust and Salubrity, however here in *England* being raised in the first of the Spring, and having thereby all the prime of the Summer and heat that Nature and Art can give them, they are a pleasant and a modish repast, and therefore deserve your singular care in their propagation and management. *Of Melons.*

There are several sorts of *Melons*, and called by several Names, but those most usually known are the *large ribbed Melon*, and the *small round Melon.*

They are sown in *February* at the full of the Moon in your hot bed, (the making whereof you shall find at the end of this Book) the Seeds first steep'd in Milk

twenty

twenty four hours, and then ſet two or three in a hole about an inch deep.

When your Seeds are in the ground, cover up your Bed to preſerve it warm, and when they are come up then cover them with Drinking-glaſſes, leaving room for a little Air near the ground.

Towards the end of *April* you may remove your Melon Plants out of the *hot* Bed, into the Bed wherein they are to grow all the Summer, which Bed or at leaſt certain large holes in it, is to be of very rich light Mould; the beſt time for this work is in an evening after a fair day.

At their firſt removal they muſt be watred and defended from *Sun* and cold three or four days together, and afterwards from the *cold*.

When the Plants grow large, you may cover them either with glaſs Bells made for that purpoſe, or with ſquare Caſes of Glaſs made by the Glaſiers for the ſame uſe. Be ſure keep them cloſe at night, and give them ſome admiſſion of Air under the Glaſs, or at the top in the day time.

To prevent Froſts from hurting your Plants, and Hail from breaking your Glaſſes, if you have any forewarning of either, you may cover your Glaſſes with Peaſe-Straw or Mats.

When

When you water your *Melons* (which they expect only in very dry and hot weather) water them at half a foot distance from the Root and not wet the Leaves.

Place a Tile under each *Melon*, it will lie the warmer upon it, and nip off the small shoots that exhaust the sap from the more leading branches.

Some prescribe to cover your *Melon* bed two or three inches with Sand, to increase the heat of the *Sun* by reflection, but Tiles under the Fruit may do as well.

Also it is advised that you shelter your newly removed Plants from the heat of the *Sun* at noon, and until four in the afternoon, as well as from the cold, and that until the Plants have gotten leaves broad enough to cover their Stalks and Roots from the parching Sun.

When your *Melons* are as big as Tennis Balls, then nip off the shoots at some distance beyond them at a joynt, and the *Melons* will grow large.

Melons are known to be ripe when the Stalk seems as if it would part from the Fruit, when they begin to gild and grow yellow underneath, and by their fragrant Odour they yield, which increaseth as they more and more ripen.

But every *Melon* appears not alike in colour when mature, therefore you muſt conſider their different Natures. If they are to carry far, then gather them when they begin to ripen, but if they are to ſpend immediately, then let them be through ripe.

When you ſpend them, you may put them before they be cut into a bucket of cold Water, to refreſh them, which will make them eat cool and pleaſant, as it will mend a bottle of Wine in hot weather.

Leave ſome part of the Stalk to the *Melon*, leſt by being broken too near, the *Melon* languiſh and loſe the richneſs of its taſte: Let them not when you gather them be too green, nor over ripe.

Preſerve the Seeds of thoſe that are moſt early ripe, and prefer thoſe Seeds that lodged at the ſunny ſide of the *Melon*.

Of Cucumbers.

Cucumbers have been in very great eſteem in the more Southern Countries, and of late Years are much improved in *England*, and become a general Condiment for the hot Seaſon of the Year, as they are crude from the Garden, and for the more cold ſeaſon as they are preſerv'd in pickle.

There

There are two ſorts of them, that is, the *large green Cucumber*, vulgarly called the *Horſe-Cucumber*, which the *French* call *Parroquets*. And the *ſmall white* or *more prickly Cucumber*, theſe are beſt for the Table green out of the Garden, but the other to preſerve. *Parroquets.*

They are planted and propagated after the ſame manner as are the *Melons*, only they require more watring, and withal they are much more hardy.

Although watring makes the *Cucumbers* more fruitful, yet they are more pleaſant and wholeſom if they have but little water.

Pompeons are much more hardy than *Melons* or *Cucumbers*; yet are they tender in their firſt ſpringing, and therefore are not uſually planted until *April*, and then for ſome time after they are come up defended from the cold. *Of Pompeons.*

They muſt be planted in rich old dung, and require a large place to ramble in, they will lay their fruit on the ground, or on Scaffolds made for that purpoſe, or on Pales or dry Hedges.

There are leſſer ſorts of them that are lately brought into requeſt that are called *Squaſhes*, the edible part whereof boyl'd and *Of Squaſhes*

ſerv'd up with powdered Beef is eſteem'd a good Sawce.

Theſe and ſeveral others of the ſmaller kinds of *Pompeons* are raiſed and managed as the *Pompeon* or *Cucumber*.

CHAP. VI.

Of Sallad-Herbs.

BEſides the great variety of Eſculent and Alimental Plants which we have already named, the greateſt part whereof may be eaten by themſelves, and not as Sawces or Sallads, there yet remain ſeveral excellent Herbs and Plants that are of great uſe in the *Kitchin*, and are very pleaſing and wholeſom at the Table, the principal whereof is the *Lettuce*, which contendeth with any of the former named Plants for Antiquity; it is an excellent Summer Sallad, cooling and refreſhing, and for that uſe hath it been always propagated: And although there be ſeveral ſorts of them, yet that one *Cabbage-Lettuce* being the beſt, eaten either raw

Of the Lettuce.

raw or boyled, the others may be neglected.

They are uſually ſown in *February* and *March*, and unleſs the weather prove very cold, they will flouriſh and yield you a Spring Sallad in the beginning of *April*, but if defended by any good defence, then will they be fit for uſe before that time.

Thoſe that are ſown in *March* or *April* in good rich Land will head very well; yet it is ſaid they will head better if tranſplanted whilſt they are young, although ſome are of another opinion.

You may blanch the largeſt *Roman Lettuce* when they are at their full growth, by binding them up with Straw or raw Hemp, or by covering them with earthen Pots fit to encloſe them, and afterwards heating the Pots with long dung.

Purſlain in ſome moiſt Iſlands between the Tropicks is a natural wild Plant, but here in *England* is propagated with ſome difficulty, and uſed as an excellent Sallad. *Of Purſlain*

It is tender in the Spring, the Froſts uſually nipping it, but rather the drought or ſmall dew Snails, for I have known more than once the ſeeds of *Purſlain*, that have been ſpontaneouſly fallen in the Autumn,

to flouriſh in the Spring, notwithſtanding the Winter, which indeed was not very ſevere.

But to have it early, you may ſowe it on the hot Bed, or in *April*, in any rich ſoil finely dreſſed, and after the ſeeds are ſown, to clap over the Bed with the back of your Spade, and water it, for it delighteth in moiſture.

If it be ſown thin, or tranſplanted apart, it will yield you fair Plants, either for ſeed, or to pickle, or to boyl.

When the Seed looks very black, then gather the Stalks and lay them abroad in the Sun, which will the better maturate the Seed; lay them on a Board or Cloth to preſerve them from ſpilling, and houſe them in the night, and expoſe them in the day until they are ripe.

It is ſaid that the Seed of three or four years old is better than the new.

Corn-Sallad. *Corn-Sallad* is well known to be an early and excellent Sallad in the firſt of the Spring; it is firſt raiſed by ſowing of its ſeed, but afterwards it will ſowe it ſelf.

Spinage. *Spinage* is known to be an excellent Herb crude or boyl'd, it is raiſed of ſeed ſown early in the Spring, but much better if ſown in *September*, that it may gain ſtrength

ſtrength to withſtand the Winter, as is by ſome affirm'd; theſe Winter Plants are fitteſt for the Lent ſeaſon, the Spring Plants for the Summer.

Endive, *Succory*, *Beets* and *Orach*, are all of them good Sallads boyl'd, and are raiſed of ſeeds in the Spring. *Endive, &c.*

Of *Sorrel* there are ſeveral ſorts, but the largeſt is moſt proper for your Garden, ſerving for many uſes in the Kitchin, it's raiſed moſt eaſily of Plants which ſhould not be ſet too near, it being apt to ſpread and grow large. *Sorrel.*

There is an Herb called *Patience*, that is planted by Sets in ſome Gardens, and makes a very good boyl'd Sallad. *Patience.*

Borrage and *Bugloſs* are very well known for the excellent properties of their Leaves and Bloſſoms, and are not to want a room amongſt your beſt culinary Herbs. *Borrage and Bugloſs.*

Chervil may be ſown in the hot Bed to make an early *Sallad*, or in *March* for other times: the Seed lyes long in the ground, you may therefore ſowe it at ſeveral times, that you may have it young and tender throughout the Summer. This Sallad is much preferr'd for its fine biting taſte, before many other dull Herbs. *Chervil.*

Alliſanders & Sceleri. *Alliſanders* are ſown in the Spring, and live over the ſucceeding Winter, and are blanch'd by ſurrounding them with long dung, or covering them with Pots, and then are they fit to make an excellent Sallad, after the ſame manner is *Sceleri* ordered. Some ſet the Plants deep in the ground, as before was directed for the *Leeks*. Thus *Beets*, *Succory*, *Endive*, *Lettuce*, and theſe two Plants ſo blanch'd, make very good Sallads.

Smalladge. *Smalladge* is an Herb ſome uſe in their *Pottage*, and is raiſed by Seed.

Parſley. But *Parſley* is the moſt univerſally uſed in the Kitchin of all Garden Herbs. *Pliny* ſaid of it ſo long ſince, that ſcarce any man there was but loved it, and that it was in ſo great repute in his time, that in *Achaia* they honoured it by Crowning the Victors in their ſacred Games with Chaplets of it, and as divers were the opinions of Phyſicians then as now of the vertues and qualities of it. This however we know, that it is an excellent Ingredient in moſt *Pottages*, *Sawces*, and *Sallads*, its way of ſowing is generally known.

Garden Creſſes. *Naſturtium* or *Garden Creſſes* are ſown in many Gardens for culinary uſes.

Indian Creſſes. *Naſturtium Indicum*, *Indian Creſſes* or *Yellow*

Yellow Lark-ſpurs, from a Flower are now become an acceptable Sallad, as well the leaf as the bloſſom. They are raiſed for early Sallads in the hot bed, but ſown in *April* will grow very well on ordinary Garden ground, and give you a plentiful encreaſe of Leaves and Bloſſoms.

Tarragon for its fine biting taſte is much uſed by ſome in their Sallads, and is increaſed by Cions and tops. *Tarragon.*

There are ſeveral other Herbs that are nouriſhed and propagated in *Gardens* for the uſe of the *Kitchin*, as *Bloodwort*, *Clary*, *Arach*, *Lang de beef*, *Nep*, *Violets*, *Strawberries*, *Carraways*, *Fennel*, *Dill*, *Muſtard-ſeed*, *Rocket*, *Rampions*, *Ramſons*, *Sage of Jeruſalem*, and *Marigolds*. The Methods of raiſing and increaſing them being ſo well known, as alſo their Uſes, that it would be ſuperfluous here to mention them.

CHAP.

CHAP. VII.

Of Sweet Herbs.

Of ſweet Herbs.

BEſides all thoſe before mentioned, there are divers *ſweet Herbs*, as they are termed, that are very neceſſary for the compounding many excellent *Condiments*, and to add a Reliſh to the beſt *Pottage*, which ſhall be here briefly enumerated.

Of Mints.

Garden Mints were univerſally uſed for Sawces in *Pliny*'s time, and much commended for their ſingular *Vertues*, eſpecially the young red buds in the Spring, with a due proportion of Vinegar and Sugar, refreſh the Spirits and ſtirreth up the Appetite, and is one of the beſt Sallads the Garden affords. There are divers ſorts of Mints, but the red Garden Mint is the beſt.

Of Sage.

Sage is alſo an Herb or Shrub much uſed in the *Kitchin*, and the young Leaves thereof, eſpecially of the *red Sage*, a very wholeſom Sallad in the Spring. The Slips thereof planted in *April* or *May* are very apt to grow.

There

There are ſeveral ſorts of *Sage*, the *red*, *green*, *ſmall*, and *variegated*, but the red is the beſt for moſt uſes.

Of *Marjoram* there are ſeveral kinds: The *fine ſweet*, which is yearly raiſed of ſeed ſown in *May*; the *vulgar ſweet*, raiſed by Slips, and the *pot Marjoram* by the ſame way; there is alſo of this latter ſort ſome that is *party-coloured*, or *White* and *Green*, and ſome only *White*, propagated for variety ſake; the uſe of theſe is commonly known. *of Marjoram.*

Thyme was anciently celebrated for its great plenty of food it yielded for *Bees*; as *Virgil* writing of *Bees*: *of Thyme.*

At feſſæ multâ referunt ſe nocte minores,
Crura Thymo plena.———

But thoſe that youthful be, and in their prime,
Late in the Night return, laden with Thyme.

Pliny ſaith, that by the plenty or ſcarcity of the bloſſoms of Thyme, you may foreſee the plenty or ſcarcity of Honey for that Year: But the worth of this Herb is not ſo much to be diſputed in this place,

as

as the uſefulneſs of it in the Kitchin, where it ought not to be wanting.

Of *Thyme* there are many ſorts. The *Vulgar Engliſh*, the *Lemon Thyme*, ſo called from its moſt exact ſmell like a Lemon, *Gilded Thyme*, *Muſk* and *Maſtich Thyme*, which laſt is incomparably ſweet, and ought to be carefully preſerved; any of the other are fit for the Kitchin.

Of Savory. Of *Savory* there are two ſorts, the *Summer* and *Winter*. The former is ſo called, becauſe it is annual and raiſed of ſeed: it is uſually ſown amongſt *Onions*, becauſe there is an ancient tradition that the growing of it there makes the *Onions* the more ſweet; if you let ſome of it ſtand to ſhed its ſeed, it is ſo hardy that it will come up again the ſucceeding Spring, although the ground be again digged.

The *Winter Savory* is ſo called, becauſe it lives over many Winters, and is increaſed by Cions as well as by Seed; the uſes of both are very well known in the Kitchin.

Of Hyſop. *Hyſop* is nominated amongſt culinary Herbs, although not ſo much in uſe in the Kitchin; as for Medicine or its natural ſweetneſs, it is ſo vulgar an Herb, that every one knows its propagation.

Of ſeveral others. There are many other ſweet Herbs that are

are useful in the Kitchin, although not so generally as the former, but according to the particular occasions that require them, as *Pennyroyal*, *Sweet Maudlin*, *Tansie*, *Balm*, *Basil*, *Burnet*, and *Coast Mary*, also *Lavendar* and *Cammomil* are not to be wanting, though not esculent in any Case.

CHAP. VIII.

Of some other Esculent Vegetables.

THere are some Plants, Herbs, or parts of them, that are esculent either of themselves or in *Condiments*, that are not usually propagated in *Gardens* for that purpose, as the young buds of *Hops* boyl'd do much resemble *Asparagus* in the eating, and are very pleasant and wholesom where the other are not to be had; the young shoots of a new lopp'd *Elder-Tree* being boyl'd, are esteem'd a most excellent dish; the ordinary buds of *Elder*, and the red young tops of *Nettles*, and of *Water-cresses*, and also of *Brook-lime*, every Herb Woman can tell you are good Spring *Salluds* or *Pottage Herbs*.

The

The green tops of *young Peaſe* cut off and boyl'd, are reported to be a moſt delicate diſh, *quære*, whether if they being cut off, the remaining Roots will not emit new ſhoots, and produce a fair crop of later Peaſe? If they will, then may you have late Peaſe better this way than by ſowing late.

Green Corn bruiſed yields a juyce that is uſed in the Kitchin in Eſculents, and ſo may be reckon'd amongſt the number, notwithſtanding my Lord *Bacon* did not eſteem it eſculent.

Muſhromes. *Champignons*, *Muſhromes* or *Mouſſerons*, have been ever reputed a dainty diſh, in the choice and preparing of which the ancient *Romans* took a great delight. Yet then were ſeveral perſons poyſoned with the uſe of ſuch of them, that were of a venomous nature, and in theſe colder Climates ſome ſorts of them are not much to be confided in.

Thoſe that are edible here with us, are either *Muſhromes* of the *Woods*, and grow by the borders of *Woods* and *Forreſts*, and are very large; or *Muſhromes* of the *Meadows* and ſweet Paſtures, which grow frequently where Cattel feed, which uſually flouriſh in the Autumn, and are moſt eſteem'd

eſteem'd becauſe of their beauty and whiteneſs above, and Vermilion beneath, having alſo a pleaſant ſcent with them.

It is ſaid that you may raiſe *Muſhromes* in beds in your Gardens, by preparing a bed with the ſoyl of *Mules* or *Aſſes*, and covering it over four fingers thick with rich dung, and after it hath laid a while to cool, then to caſt on it the parings and refuſe of *Muſhromes*, and old rotten *Muſhromes* with the Water uſed about them, and in a ſhort time your bed will produce them. Or ſuch water poured on Melon beds will cauſe it to ſend forth *Muſhromes*.

It is probable that theſe though unperfect Plants, may have a Seed, which ſown in an apt place may produce others of the ſame *Species*.

My Lord *Verulam* in his Natural Hiſtory gives a very good character of them, imputing unto them two ſtrange properties: The one, that they yield ſo delicious a meat; the other, that they come up ſo haſtily; I have known one of about a foot in diameter almoſt round and full, of ſcarce twice twenty four hours growth. *Century 6.*

The ſame honourable Lord tells you, that it's dangerous ſurfeiting with them,

them, and gives you ſeveral Reports, that the Bark of white or red Poplar cut ſmall, and caſt into furrows well dunged, will cauſe the ground to put forth *Muſhromes* at all Seaſons of the Year fit to be eaten.

He alſo adds a Report, that Harts-horn ſhaven or in ſmall pieces mix'd with dung and watred, putteth up *Muſhromes*.

CHAP. IX.

Of general Improvements, and Miſcellaneous Experiments.

SECT. I.

Of improving Garden ground by Labour only.

HAving thus briefly given you a particular of Ornamental, as well as uſeful Parts and Materials for your ſeveral Gardens, and the ſpecifical ways of preparing, ordering and managing of the various Plants, Flowers, and other Curioſities uſually growing in them, it now re-

remains that ſomething be ſaid as to the more general manner of improving your Ground, and preparing of Dungs, Soyls, and Compoſts proper for your uſe, and making of hot Beds, with many other things neceſſary to be known by ſuch that delight in the improvement of Hortulans.

Of the general mixtures of Earths the one with the other, to qualifie their natures by adding that of a contrary, I have before diſcourſed. Of the preparation of Earth without any ſuch mixtures, Sir *Hugh Platt* hath given you an Ænigmatical deſcription, calling it his *Philoſophical Garden*; his Precept is, 'To pave a ſquare plot with 'Brick (if covered with Plaiſter of *Paris* 'the better) making up the ſides of Brick 'alſo, plaiſtred likewiſe; let it be of a 'convenient depth, fill it with the beſt ve'getative *Saturn* which you can get, that 'hath ſtood two years, or one at the leaſt, 'quite within his own Sphere, make con'trition of the ſame; and be ſure to avoid 'all obſtructions, imbibe it with *Aqua Cœ'leſtis* in a true proportion: grind it once 'a day till it be dry; being dry, let it ſtand 'two or three days without any imbibiti'on, that it may the better attract from all 'heavenly influence, continuing then al-

'ſo a Philoſophical contrition every day, '(this grinding muſt alſo be uſed in the 'vegetable works where the Mercury of 'Herbs is uſed inſtead of *Aqua Cæleſtis*) 'during all the time of preparation: Then plant what rare Flowers, Fruits, or Seeds, 'you pleaſe therein; the ſame Philoſopher 'then tells you, that (if his theory of na-'ture deceive him not) that *Saturn* ſo en-'riched from the Heavens, without the 'help of any manner of Soyl, Marl, or 'compoſt (after one years revolution) 'will make the ſame to flouriſh and fru-'ctifie in a ſtrange and admirable manner.

By his vegetable *Saturn* may be underſtood ſuch earth that is moſt prone to ſend forth Plants; by its ſtanding ſo long within its own Sphere, is only that it hath been covered either naturally by Turf, or artificially by building, or ſuch like, that it hath been prevented from waſting its fœcund nature by ſending forth or bearing Vegetables. The beſt of ſuch reſted fruitful Earth is to be put in what quantity you pleaſe into your Brick or Stone Ciſtern (being made proportionable) but not too deep leſt it hinder you from ſtirring the Earth to the bottom, and will not permit it to dry ſo eaſily, this muſt be reduced

to

to a fineneſs: therefore it would not be amiſs to let it paſs the Sieve or Screen before you put it in your Ciſtern. The imbibition of this Earth with *Aqua Cœleſtis* can be no other than which Rain-water, which is exhaled from the Sea, by the influence of the Sun, and in the Air attracteth a Volatile Nitre, which deſcending with the Rain on the dry Earth is ſoon imbibed again; this Volatile Spirit or Nitre that thus ariſeth in ſo great a quantity, is that *Spiritus Mundi* that cauſeth all Vegetation, and wherewith the Air it ſelf is filled, and by ſeveral ways coagulated, and by the often irrigating the earth with it, the earth is the more fertilized; But this way of continuing the contrition or ſtirring it every day to dry it, makes the earth much eaſier to attract the water, which being added in a true or ſo little a proportion, that it may not wet but moiſten only, the earth will leave its nitrous or vegetating vertue behind it, when the Phlegmatick part fumes away again by the ſtirring of the earth, which if it were added in too great a quantity would exhauſt the nitrous ſpirit that was before in the earth. For it is a general obſervation amongſt Philoſophers, that as the greater overpow-

ereth the leſſer, ſo if the matter you add be volatile and greater in proportion than that which is fixt, it is apt to volatilize that which before was fixt, being added unto it: and on the contrary, that if the volatile matter be leſs in proportion than the fixt, to which you add it, then is that which is fixt apt to fix the volatile: therefore did our Author wiſely add, that the imbibition ſhould be made in a true proportion, which is, that the rain-water ſhould be only for an eaſie humectation, and not too great a wetting; then he tells you that it ſhould ſtand too or three days without any imbibition, that is, between every humectation the earth ſhould be throughly dried as the air or wind can dry it, which will take up ſuch a ſpace of time, notwithſtanding your daily ſtirring it; for the drier any open terreſtial matter is, it doth not only the more eaſily attract, but more perfectly fixeth that which otherwiſe would be more volatile; although our Author hath not given caution of it, yet it is preſumed that the ſquare Plot or Ciſtern he preſcribes ſhould be covered or defended from the Sun, which by his rays is apt to attract much of the *Spiritus Mundi*, or matter of Vege-

Vegetables, where there is plenty unfixt; as is evident from the various ſmells that are exhaled by it, and colours alſo much ſooner faded by the Sun-beams than by the heat of fire: and alſo from the rain which in great ſhowers is apt to over-moiſten it, and in continued Rains, to prevent its drying; therefore your Rain-water ſhould be kept in a Ciſtern made for that purpoſe, where the longer it remains the better it will prove; ſuch vertue always encreaſeth whilſt it is in its proper Matrix, as appeareth by Urine kept long, which yieldeth much more ſpirit than whilſt it is new.

By the Authors ſaying that this grinding is to be uſed in the Vegetable work, where the Mercury of Herbs is uſed inſtead of *Aqua Cœleſtis*; it's probable here he means the expreſs'd Juice of green Vegetables, which virtually hath in it the matter of Vegetables, and may have the ſame effect on the Earth in a ſmall quantity and little time, as the Rain-water hath in a greater quantity by the long continuation of the operation.

This way of contrition, imbibition, and coagulation enricheth the Earth after the ſame manner, by covering it many years

with building, by which means Salt-petre is encreased: Only by this operation you may effect your design in one year with labour and diligence, which there you must wait many years for: and by this may you heighten the vertue of your Soil to a far higher degree, it being manual, than the other which is natural and will not exceed the ordinary bounds limited in this Climate.

That our Authors *Saturn* is our natural and common Earth, and his *Aqua Cœlestis*, Rain-water, may be concluded from his own expressions, used in the same description of his Philosophical Garden, which are, 'That if the Earth it self, after it hath 'thus conceived from the Clouds, were 'then left to bring forth her own fruits 'and flowers in her own time, and no 'Seeds or Plants placed therein by the 'hand of man, it is held very probable, 'that this Heavenly Earth so manured 'with the Stars, would bring forth strange 'and glorious Fruits and Flowers, *&c.* Which is not improbable, if we consider the fertility of the waters of *Nile*, which are first exhausted in those hotter *African* Regions by the power of the Suns influence (when in a due latitude,) and condensed

denſed by the Air far more fruitful, as well as the Earth, in *Nitre* there, than in theſe colder Regions yielding that great and fertile floud, whoſe precipitate or ſettling ſlime ſo far inricheth the dried and thirſty Earth, that it not only ſpontaneouſly produceth abundance of Vegetables, but Animals alſo.

I know no reaſon but by obſerving our Authors direction in this Climate, a diligent Operator may advance the vertue of our Earth, to the ſame Degree or greater than the *Egyptian* Soyl, and then may it anſwer his Expectations, in producing ſuch rarities, that by no other ways are here attainable; for if any man would advance or improve nature, he muſt tread in natures ſteps, and trace her to the Foundation. Next unto this extraordinary improvement of Earth by labour, without any other mixture than Earth and Rain-water, which many will not experiment, becauſe of the length of time required in it, you may facilitate the Operation, by often ſtirring or digging your Land, and reducing it to a fineneſs by skreening it, which alſo is a means to cleanſe it from Weeds, Stones, Worms, *&c.* that annoy your tender Plants; by reiterating of which

Work, you expose the Earth thus opened, to the Air, Frost, Snow and Rain, and capacitate it to receive the benign Influences of the Heavens, and prevent the exhausting of the nitrous Spirit by the growth of any Vegetables in it. This Operation the longer you continue it the better, the time for the beginning of it is not material, so that you let it receive the effects of both extream Seasons: like unto this are your fallowings of Land for several grains, especially the fallowings and twi-fallowings for Wheat, long before the last plowing at the Seed-time, and in several cases a contrition or dragging after the fallowings, which proves a considerable improvement of stiff Land. Thus may you see how Nature is improved by industry only, and that but by treading in her own Steps; for Earth often trod on by Men or Beasts in the Streets or High-ways, is very much enriched by such exposure, and Earth defended from the Sun and Air, in like manner becomes fertile, although from different Causes, the former from the volatile Nitre, and other influences in the Air, Rain and Snow, the latter from the condensation of the *Spiritus Mundi*, or nitrous breathings of the Earth, and both by reason

that

that those fertile qualities are not exhausted by Vegetation.

But as this latter Operation is more facile than the former, so you cannot expect that it should produce Effects answerable to the other, which is very much to be preferr'd by such that are curious; although this latter way may yield you a sufficient recompence for your labour, yet the former cannot but far transcend it.

SECT. II.

Of several ways of enriching Earth by mixtures.

IT is without question that Earth or Mould is to be made more fertile than naturally it is, by mixing therewith several materials that contain in them much of the vegetating Spirit, as the Ashes of any manner of burnt Vegetables. For by such burning is wasted the more phlegmatick and useless moisture, and are fix'd the more solid and substantial parts: the same effect hath fire on the Turf or rooty surface of the Earth; this smegmatick or oyly

oyly matter that is left by the fire, in a moderate proportion applyed to any Earth highly enricheth it, and makes it apt for fructification, as appeareth by the vulgar Experiment of Burn-beating of Land, which yieldeth so fair crops of Wheat and other grain. In which operation the Rustick observes, that over-burning the Turf is injurious, and that a more moderate burning maketh the ground more fertile. The Reason is plain; for in the burning of any Vegetable, a gentle easie and smothering fire doth not waste the volatile nitrous Spirit so much as a quick, but causeth much more of it to fix and remain behind.

These fixed Salts that are thus obtained, are the principal Salts that are so much celebrated for the improvements of Earth, to render it more fruitful, although there are many other Salts near in affinity to these, that do in some Degree meliorate Earth, as the Salts that are in *Blood*, *Urine*, *Soot*, and several other things of the like nature, by the mixture of those materials with the Earth, or sprinkling it with them, whereby the Rains usually carry down their vertue to the Roots of your Plants.

The

The parts of Animals, as *Skins*, *Hair*, *Feathers*, *Fleſh* and *Bones*, *Horns*, *Hoofs*, &c. contain in them much of theſe Vegetating Salts, although Volatile, yet in ſuch compact bodies, they continue until they are by your Plants attracted, as many Huſbandmen have made Experiments, of the extraordinary vertue that is in old woollen Rags in fertilizing Land for Corn, giving ten times the price for a load of them to lay on their Corn-ground, that they will for a load of dung, and are yet great gainers by it, and fetch them from near *London* into *Hartfordſhire* into the bargain: *Wooll*, *Hair* and *Feathers*, are near of a nature, and therefore have near the ſame effects.

The *Fiſh*, and *Bones* of *Beaſts fleſh*, &c. are generally known to add very much to the improvement of Land; but for Garden uſes, it will be more conducing to your purpoſe, to let the ſame be throughly putrified, and reduced to a moderate compoſt with Earth before you apply it, for all nauſeous and ill ſavoured materials are to be excluded your Gardens; either for the Kitchin, or for delight.

Horns, *Hoofs* and *Skins*, contain in them much of a rich volatile Salt: and it hath been anciently obſerved, and in ſuch Coun-

tries

tries where naturally the ground is more replete with Nitre, and more fertile than here, that these materials have very much fertilized Garden-ground, especially for the *Asparagus*, that requires strong nourishment; therefore the shavings or odd pieces of Horn, and the lesser Horns and the Hoofs, and other excrementitious parts of Beasts, at the common Slaughter-houses may be obtain'd, to make your deep Beds for *Asparagus*, *Artichoaks*, and such like, and may not be unuseful in enriching your ground for your choicest Flowers.

The shreds of *tann'd Leather*, partaking as well of the Salt of the Oaken bark and lime, as of the Beast, must of necessity prove a very great improver of your Garden-ground, and may be had in great quantities at the Shoomakers, where they usually burn them. These shreds soon rot, and with *Rags*, *Hoofs*, *Horns*, *Hair*, &c. mixed with a good quantity of Earth, and laid in a Pit, and sometimes watred, will make an excellent Compost for your Kitchin garden, if afterwards disposed of in proper Beds.

Of Sheeps dung. Take Sheeps dung and put water to it (in some Vessel) so much as by stirring may reduce it to a pap, and when it is all throughly dissolved, mix some fine sifted Earth

Earth with it; let the Earth be four, five, or ſix times more in quantity than the Sheeps dung, according as the Earth is in goodneſs: if it be a poor ſandy Earth, the more of the Sheeps dung it requires to enrich it; if it be a ſtiff ground, the more it requires to make it light, but an indifferent mellow Earth requires the leſs, for Sheeps dung is one of the richeſt of dungs. As may be obſerved from the great improvement that is made by Flocks of Sheep, being folded on the poor champion Lands, where ſuch Land yields much Corn, when not being ſo improved it will yield but little, and this from one only folding in ſeveral Moneths, or ſometimes in a whole Year together; Deer and Goats dung are much of the ſame nature with Sheeps dung. The reaſon of which extraordinary fertility in that ſoyl is from the well chewing the food, the long continuance in the body, and the not (or but little) drinking of the Beaſt. For Sheep and Neat chew the cud, by which means their food is made fine, both theſe (and ſo do Deer and Goats) retain their meat longer than Horſes or Swine, who feed more groſly and haſtily, the dung of the one being like wiſps of Hay, of the other

other like a mixture of all sorts of filth. Also *Sheep* and *Deer* drink but little, which make their Dung and their Urine (which also is very rich could it be preserved) very fertile. *Neat* drink much, which very much tempereth and allayeth the heat and fertile nature of the soyl. Earth thus mixed with Sheeps dung dissolved, is very excellent for most sorts of *Fibrous* rooted *Flowers*, because the decay of the dung (which will be in time) leaves the ground porous, that the fibres thereby as well insinuate themselves and spread abroad, as they do contract the richness the dung affords them: *Tuberous* rooted *Flowers* also affect this mixture: *Artichoaks* delight in it exceedingly, and Sheeps dung applied to the Roots of them, and then often watred, whereby the vertue of it may be conveyed into them, makes the Plant yield you fair fruit; most Garden tillage affect it, for it is not only a very rich soyl, but renders the ground light and porous, which is very advantagious to Tillage.

Neats dung A mixture of Neats dung after the same manner, is very good for most of the same uses, as is that of Sheeps dung. And better in some particular cases, for that if you have occasion to remove or plant any good

Flower

Flower in the Summer-time, or out of its proper Season, such a mixture of Earth and Neats dung made into a liquid pap, and the Tree or Flower placed in it, that the liquid matter may encompass the root, will so adhere to it, and be so cool and moist, that it will cause the Plant to thrive as well, as if it had been planted or removed in its proper season.

Horse dung. Horse dung whilst new is the hottest of dungs, laid in a great quantity together, by reason that a Horse chews his meat but little, feeds hastily, and evacuates it in a short time; so that like chopt Straw or Hay, but beginning to ferment in the belly of the Horse, it continues fermenting after it is in the dunghil; but if it be laid up with the litter that is usually moistned with the Urine of the Horse, and after it is throughly rotten, which will be much the sooner if it lye in a moist place, or be often watred by Rain or by hand, and turned withal, or cast, as the Husbandman usually terms it, it then makes an excellent Compost for your Kitchin garden.

Swines dung. In your Swine-yard, or places where Swine usually tread or feed, the Earth is very much improved by their dunging and pissing, which trampled into and mixt with

with the Earth, makes it become a very good Compoſt, eſpecially to allay that rankneſs or over-freeneſs of ſome very light and rich Soyls, that breed the Canker in Trees, and too many Worms, and other Vermin, and Inſects that deſtroy your choiceſt Plants. This dung or earth ſo inriched, being a fat cooling Compoſt, may be with ſucceſs uſed in both your Gardens, but rather amongſt your Fruit-trees, where it excels.

Aſſes dung. Aſſes dung is near of the nature of *Sheeps dung*, *Deers dung*, *&c.* ſpoken of before, although not altogether ſo rich.

Pigeons dung. The dung of all Corn-fed Fowl is very hot at the firſt, eſpecially that of Pigeons, becauſe they feed haſtily, and evacuate the ſame digeſted in a ſhort time, and urine not. So that their drink is no more but only to digeſt and nouriſh, and not to carry away any of the vertue of the meat, nor leſſen the ſtrength or fertility of the dung. Experience hath taught the Huſbandman, that in the Champion Countries, where great ſtore of Pigeons dung is to be had, the ſame ſown but thinly with Barley, makes a poor ground yield a good crop; for when but thinly ſown, the Rain and Air ſoon qualifie its preſent heat, which if it were laid

laid thick would burn the Corn, especially at that season, or else make it grow too rank, which is as great a fault as its being too short. Therefore you may well conclude, that these dungs laid in a heap in the open Air, and moistned by the Rain or otherwise, until their heat is over, will make a most rich Compost for either Garden, but more especially for your Kitchin Garden.

I only here give you a Caution, not to use Malt dust in your Garden, for there are many seeds of pernicious Weeds in it, that have passed all the imbibitions, fermentations and exsiccations of the Malt, and yet retain their vegetating nature, and will furnish you with new species of Weeds out of the fields, that your Garden before was not acquainted withal. *Malt dust.*

The setlings of Waters where there is least current, is the best, but the Mud or residence of any Water, unless it be overmuch sandy, is excellent to qualifie the nature of your ground; if your ground be light, then use stiff Mud; if your ground be stiff or cold, then use light or sandy residencies: these mixtures are good for all sorts of Garden-ground. *Mud of Ponds.*

Any Ashes or other matter whatsoever *Salts.*

that contains Salt is good, ſo that the quantity of the matter containing the Salt, doth not too far exceed the Salt contained in it, as uſually Wood-aſhes after they have been in the Waſh-houſe, Soap-houſe, or elſewhere, have the moſt of their Salt extracted, and then applied to your ground ſterilizeth it, unleſs it be to a ſtrong Clay ground, then it will make it lighter although not richer.

The Aſhes of any burnt Vegetables are excellent, as before we obſerved; a mixture of Lime is very good in moſt grounds, but the Salt of Lime extracted by Water, and your ground watred therewith, is much to be preferred. It hath alſo this ſingular property, that it makes the Worms ſoon leave the place watred therewith, and expoſe themſelves to the Air where they ſoon periſh, or to the Birds who devour them. The ſame effect is wrought by any *Alkalizate Salts*, or Salts produced by fire.

Murc. The *Murc* or refuſe after the preſſings of *Cider* and rotten Fruit, are very good to mix with your Earth, but it muſt be after it hath lain a long time in ſome pit or heap until it hath loſt its ſavour, and until the ſeeds or kernels are dead, leſt they germinate

minate and incommode your Garden.

Any drexy Wood, or the duſt of the Wood-pile, but more eſpecially rotten Willow, is excellent to make the Earth light for moſt fibrous rooted Flowers. The ſame is Saw-duſt, if it firſt lye in a moiſt place until it be rotten, and hath its acidity abated or digeſted. *Rotten wood.*

Straw or any dry Vegetables become rotten and mix'd with Earth, maketh it light and fit for your choiceſt Anemonies, and all fibrous rooted Flowers. *Straw.*

Tobacco dryed or cur'd, and afterwards mix'd with your Garden mould, will doubtleſs exceedingly enrich it: For it is of a very high and ſtrong nature, and containeth much of a Volatile Nitrous Salt in it, and is reported to be equally as effectual in the tanning of Leather as the Bark of the Oak, which if it be true, as I have no reaſon to doubt it, it may prove a conſiderable improvement of many Country-farms, and of great benefit and advantage to the Nation in general, either of which uſes is better than that to which it is now uſually put unto. *Tobacco.*

SECT. I.

Of Watring Gardens.

Fat Waters. BEsides the mixture of several materials and composts with Land to make it fruitful, you may add enriched Waters, which serve where you cannot conveniently change your ground, or remove your Plant, as in several *Flower-trees*, and *Artichoaks*, *Asparagus*, &c.

That Water is very good that is taken out of standing Pools, where Cattel usually resort to shade or cool themselves in hot weather, and leave their dung in it, which by the stirring of their feet enricheth the Water; Ducks and Geese also much improve standing Pools where they frequent.

Several Waters may be prepared, in which you may steep or macerate your seeds or pulse, to make them sprout the sooner or come the fairer, and with the same Water may you irrigate your ground: many Receipts there are to that end, I shall only mention some of them.

Take Sheeps dung well dissolv'd in warm water, and after it hath stood twelve hours, strain

ſtrain it through a courſe cloth with compreſſion, for it is ſo ſlimy that it comes through with difficulty, therefore I ſuppoſe a decantation may ſerve. To two or three Gallons of this liquor add a handful of Bay-ſalt, and ſomewhat a leſſer proportion of Salt-peter, and let them both be diſſolved in the former water, which to expedite let it be made lukewarm and ſtirred often, in which liquor let your ſeeds lye for twenty four hours or more, till they are throughly ſwelled, Pulſe need not to lye ſo long; then take out your ſeeds or pulſe, and expoſe them thinly on ſome floor to the Air (not the Sun) until they be half dry, then ſowe them. It is alſo preſcribed that the remainder of the Sheeps dung that was not made liquid, ſhould be dryed and calcined, and the fix'd Salt extracted out of it, and added to the former compoſition, but it's more probable that another parcel of Sheeps dung calcined, would yield more and better Salt, than the remaining part of the diſſolved dung. This latter part makes the proceſs too difficult and troubleſom, and adds but little to the vertue of it, any other fixed Salt having the ſame effect as that ſo hard to be obtained.

This Liquor is more effectual for the watring of Plants than it is for the maceration of Seeds, and so are any other salt Waters. Some add a greater quantity of Salt-peter, and Bay-salt, some only Salt-peter, others use Pidgeons dung instead of Sheeps dung; also Lime-water after that manner enrich'd with *Sheeps* dung, *Pidgeons* dung, or *Neats* dung, is equal in vertue, if not exceeding that, to which Salt-peter or Bay-salt is added. Every Husbandman hath experimented the effect of Lime, the Salt only extracted by the Rains enriching the Earth occasioning so plentiful a crop, the other remaining part like a *Caput Mortuum*, only tempereth the Land for the future, and maketh it more sad where before it was too light, which if the Land did not require it, then doth Lime (after its Salt is wasted) much injury to the Land whereon it is laid.

Nitre or Salt-peter only, dissolv'd in water, a pound to four or five Gallons, is held to be very effectual to enrich barren Mould. This agrees with our Observations about Earth covered with building, or otherwise defended from Sun and Rain, for the generation of Nitre.

Some commend the sprinkling of Milk and Rain-water on the Beds, first sifted over with

with Lime pulverized, whether by pounding or ſlacking with water it mattereth not, (neither of which can improve or abate the vertue or quantity of its Salt, the thing we deſire) and after every watring ſifting more Lime. This way may not be amiſs for ſuch Lands, that the *Caput mortuum* of the Lime remaining after the Salt is extracted, will not prejudice, and for ſuch Plants that the Lime lying on the ground will not injure. The Milk may be left out, not ſignifying ſo much as the value of it amounts unto, the liquor wherein fleſh meats (whether freſh or ſalt) have been boyled, is much better and eaſier obtained. The Salt of Lime (extracted with water in ſome large wooden veſſel) containeth in it the ſame improving vertue, and is leſs troubleſom to make uſe of, and free from the inconveniences that attend the other way.

Much more might be ſaid concerning theſe improving Liquids as well as Solids, but that the moſt learned and experienc'd of Rural or Hortulane Authors, hath lately been very copious on the ſame Subject. Mr. *Evelin.*

Only I may here adviſe the unexperienced not to water his Plants in either Gar-

den, with a cold Spring or Well-water, if he can obtain any other, which if he cannot, then to expoſe this to the Sun or Air ſome time before he uſeth it, or enrich it by ſome pinguid mixtures, as Lime, Aſhes, Dung, or ſuch like, will quickly qualifie it for his purpoſe, by abating the ſudden coldneſs of it to the Plant. For it is a very great injury to moſt tender Plants, to be diluted with cold water from the Well or Spring, and check their growth exceedingly, as may be obſerved in a bleeding Vine, to the naked Roots of which if you pour ſtore of cold Spring or Well-water, it ſuddenly checks the aſcenſion of the Sap, by means whereof the bleeding ceaſeth, and the wound conſolidates again before the more liberal aſcent of the Sap, much more then will it check the growth of a weak Herb or Flower.

Alſo as it is obſerved to ſowe in the duſt, whereby the ſeeds gradually ſwell from the cold dews of the Night and Air, and are made ready to ſprout with the next Rains, ſo it is not good to water new ſown ſeeds, until the long defect of ſhowers invite you to it; ſome ſeeds, as *Radiſh*, *Lettuce*, *Gilliflower*-ſeed, *&c.* remain not long in the Earth, and therefore may in two or three days

days for want of rain, be watred by hand; but *Tulip*, *Auricula*, *Parsley*, *Carrot*-seed, *&c.* lye longer in the ground, and require not so speedy an irrigation.

All seed ought to be watred by the smalleſt or Rain-like drops as you can, and not too much, for hasty watring and hasty showers discover them.

For most Flowers and Plants whose leaves lye near the ground, it is best to water them at some distance, by making a Ring round the Plant a little hollow, and pouring the Water into it, whereby you annoy not the leaves with your discolouring water, or chill them with the coldness of it.

In all warm weather the evening is the best season to water in, because the water will have time to sink into the Earth, and the Plant to attract it before the heat of the Sun exhales it; but in cold weather, and when the nights are cold, the morning is the most proper time, that the superfluous moisture may be evaporated before the cold Night overtake you, and chill your Plant.

By no means use Liquors either naturally hot as Spirits, or artificially made so by heating it over the fire.

A Plant that delights in moisture, or a drooping Plant that you may suppose Water will preserve, may be watred by Filtration. Which is by placing an earthen pot full of water near the Plant, and putting therein the end of a list of woollen cloth, the other end thereof to hang down on the outside of the pot to the ground, near the root of the Plant. By means of which list if it be thick enough, the water will filtrate or distil over the brim of the pot through the list of woollen, so long as any water is in reach of the list in the pot, always observing that the end of the list in the outside of the pot, be longer than that in the inside, and that the list be thorowly wet before you add it. The Reasons of this Operation, which many Country Colona's daily experiment, we will not here discourse of.

watring of Flower-pots. To water your Flower-pot, that the water may the easier descend to the bottom, and throughout the whole pot, you may before you fill it with earth place in it a pipe of Lead, Latton, or such like, close at the bottom, with divers holes at the sides of it, let the Pipe extend in height to the top of the pot, and when the pot is full of Earth and planted with Flowers, and

and that you cannot conveniently otherwiſe water it, then with a funnel fill the pipe with water, and reiterate your filling of it until you think there is enough, and by the holes on the ſides of the pipe, the water will moiſten the whole pot of earth. The water you uſe here ought to be meliorated by ſome of the former ways: For earth thus ſeparated from the ground, is more apt to decay than that which is remaining on its natural foundation, which continually receives an improvement, by perſpiration of the vegetating ſpirit.

Watring-pots.

There are ſeveral ſorts of watring pots in uſe for Gardens, the moſt uſeful is the common Watring-pot made of tinn'd plate or Latton; the noſe or end of the ſpout whereof is covered with a cover wherein are many ſmall perforations, that the water may force through in ſmall ſtreams, and beſprinkle your Plants or Seeds like unto Rain. This Cover is made to take off and on to cleanſe at pleaſure.

There is another ſort of Watring-pot that hath a ſmall hole at the bottom and another at the top, ſo that when you ſink it into a Veſſel of water, it will fill by the lower pipe or hole, the air paſſing out at the hole at the top where the handle is alſo: when

when it is full take it by the handle and ſtop the hole with your thumb, and when you come to the Plant you intend to water, you may eaſe the hole whereon your thumb lies, and as you pleaſe let the water out at the Pipe in the bottom; for as the air comes in at the top, the water will iſſue out at the bottom, and ſo may you ſtop it, and open it with your thumbs at your pleaſure; with this Pot you may eaſily let the water down on your Plants that can bear with a waſhing ſhower.

You may water any ground by the firſt ſort of Watring-pot, with any enriched or thick water, if you take off the cover of the Pipe, and convey the ſame water about the roots of any Plants without fouling the leaves or flowers.

Alſo you may have a ſmall Engine made like one of the Engines for the raiſing of water to extinguiſh fire withal, and place it in a frame to drive to and fro about your Garden; you may fill it with water, and the Spout or Pipe with a perforated Cover like unto the common Watring-pots (but not ſo broad as to ſpread the water ſo much) with this Engine may you imitate rain over any of your Beds at a diſtance, and waſh your wall

Trees

Trees from Vermine, and refresh them at your pleasure.

To preserve your Watring-pots.

Any of these Watring-pots may be preserved for many years from Rust, to which they are very apt by painting them over with Linseed Oyl and Red Lead.

SECT. IV.

Of making Hot Beds.

IT is evident to all that most Plants do naturally observe the Season of the year in their Germination, growth, and maturation; and although they are removed into another Climate, yet do they incline to the observation of the same time as they did in their own former natural place of their growth, as the *Persian Iris*, *American Strawberry*, and several others, which make them the more acceptable as they come earlier or later than others of the same kind. So is it with many other Flowers, Fruits, or Herbs: for we annually observe how aceeptable a dish of early Peale is over what they are when later and common; and so are *Asparagus*, *Cucumbers*, *Melons*, *&c.*

The

The growth of moſt Plants is quickned by a warm poſition, as under a warm Fence or Wall, and by an artificial heat, as by being planted againſt a place where fire is uſually kept, or by watring them with waters impregnated by hot dungs, which will very much accelerate Germination.

To raiſe a Sallad in few hours.

If you would have Herbs to ſprout immediately, then lay a Bed of unſlak'd Lime powdered, with a mixture of Aſhes if you pleaſe, or without; on that a lay of hot dung, and on that another lay of Lime, and then on that a lay of fine rich Mould, wherein ſow your Seeds, as *Lettuce*, *Purſlain*, *Corn Sallad*, *Parſley*, &c. firſt ſteep'd in White-wine or ſome of the former prepared Waters, and water them when ſown with ſome of the ſame richeſt Waters, and they will ſuddenly appear above ground, and as you water them ſo will they proſper. This ſhould be done within doors leſt the coldneſs of the Air ſhould impede their growth, the often watring them facilitates their nouriſhment.

But the hot Beds that are moſt uſeful, and whereon you are to raiſe your tender exoticks, and your early flowers; and alſo

to

to raise and bring forward your *Melons*, *Cucumbers*, *Cauly-flowers*, *&c.* is usually made in *February*, and after several manners.

Some prescribe the making of it, by laying of hot Stable dung that hath lain in a heap, mixing the newest with the old, and laying it about four foot broad, the better to preserve its warmth, three foot high, and as long as you have occasion or materials. This Bed well trod (to excite the heat) is to be covered about four inches thick with very fine rich Mould, the top of the Bed being first edged round with board to keep up the Mould: thus must it ly until it hath passed its greatest heat, which you may prove by your finger, for it ought to be but warm, not hot. In case its heat lesseneth at any time, you may encrease it by applying new dung to the sides of your Bed, on this may you sow your Seeds.

There must be some frame Arch-wise, or flat, over this hot Bed, that a covering of Mats or Straw Hurdles may be spread over it every night and in cold days: make your covering so that it may as well keep out the Rain and Snow as the Wind.

But

But the best description of a hot Bed is that of Mr. *Evelin* in his late Philosophical discourse of Earth, to this effect; Dig a pit about four foot deep, of breadth and length as your occasions require; wall this Pit on every side with Brick, or erect your wall above the ground, or part above, and part under; then fill it with hot dung from the Stable, and tread it well. In this place wooden Cases of about a foot in depth bored full of awger holes at the bottom; fill them with earth rich and light, and add hot dung between them; in which Cases sow your Seeds, and these Cases and the Earth in them will be kept warm by this means during the whole season wherein a hot Bed is necessary. You may provide a shelter against rain and cold over the whole if you please, and you may have frames of glass over some of your inside Bases where there is most need, others you may leave open as your Seeds require. By this means have you your Pit and Cases every Year ready to your hand, requiring only a supply of fresh dung.

SECT.

SECT. V.

Of Miſcellaneous Experiments.

THe often removing of Flowers in their proper Seaſon preſerves their colours, eſpecially their variegations; for long ſtanding in one ſoyl cauſes any Plant to degenerate, partly becauſe the Plant hath exhauſted the proper nouriſhment for it, out of that place where it hath ſtood ſo long, and partly becauſe the ſoyl is apt to change the nature of the Plant, being exotick to it, as is uſually obſerved in *Beans*, *Wheat*, &c. ſown on the ſame ſort of Land, although not on the ſame parcel, is apt to degenerate. Therefore removing of Plants and alteration of the ſoyl is a good way to improve them, ſeveral Eſculents grow the fairer, as *Cabbages* will not leave well in caſe the young Plants be not three or four times removed before the Spring. The ſame is obſerved in *Lettuce*, *Onions*, and ſeveral others. If they are removed into improved Earth every time, they will eat more tender and better. *Often removing of Plants.*

Flowers are more in eſteem when they come early than when they come late: to

To make Plants come late.

make them early the means are generally known, but the retarding of their flowring, often removing and preventing the usual excitements of the Sun and Air, will effect; for the disturbing the Roots in the removal is a great hindrance to their attraction of nourishment, and it will be several days after the removal before new fibres will shoot forth to gather new nourishment: and the standing of a Plant prevents the digestion of the Sap by the heat of the Sun and Air. This is of great use in retarding the flowring of several Flowers, and also the growth of several Esculents, as Cauly-flowers, &c.

Plants to defend from cold and Sun.

It is usual to defend several tender Plants from the cold in the Winter to preserve them, and to expose them to the Sun in such Winter days that prove clear, which exposure injureth the Plant more than the cold. For the Sun beams in frosty weather, especially if there be snow on the ground, makes a Plant faint and sick. As is observed in the Laurel, which if it grow against a North wall, or in the shade, although open to the severest Winds, yet retains its green colour all the Winter, but if it stand in the Sun, it changeth yellow, only from that cause. The same is ob-

obſerved of ſeveral tender Plants that are uſually ſheltred from the Winds and expoſed to the Sun, yet it is not improper to give Plants Air and alſo Sun in mild Weather at any time of the Winter, which cannot hurt them.

Often cutting of Plants.

The cutting off of the Buds and Branches of Flowers, leaving only one, or two, or more, as the ſtrength of the root will bear, cauſeth it to yield the fairer Flowers than otherwiſe it would do: after the ſame manner if Herbs be often cut, they gather the more ſtrength, yield the fairer leaf, and take better root, and endure the Winter the better. The cauſe is, that the ſap hath leſs to nouriſh, and that which is nouriſhed muſt therefore be the ſtronger; and the leſs the ſap is expended above, the more ſtrengthens the root in the ground, as may be obſerved in moſt Trees that are lopped. And then do they afterwards iſſue forth the faireſt Branches; ſome Plants uſually periſh in the Winter for want of being cut in the Summer precedent, and from the ſame cauſe, as *Wall-flowers*, *Thyme*, *Marjoram*, &c.

Plants to continue long.

Some Plants are too apt to waſte their ſap in Flowers, and thereby ſhorten their lives, as *Gilly-flowers*, *Stock Gilly-flowers*, and

ſome others, which if their blowing ſhoots were nipt off, they would gather ſtrength and continue longer, for the waſte of the ſap overmuch makes the Plant feeble, and uncapable of enduring any ſeverity of Winter or Summer, as is ſometimes obſerved in young Fruit-trees, that they bloſſom themſelves to death: and ſome I have known to grow themſelves to death, for the freer the ſap is in expending it ſelf in Branch and Bloſſom, the more tender is the root, which becomes a prey to the Worm and Canker, as doth the Branch to the ſevere Air. The way to prevent which, is preſcribed in the laſt mentioned Experiment.

To meliorate Plants It is obſerved that all Herbs wax ſweeter, both in ſmell and taſte, if after often cutting you take the latter Sprouts, becauſe the ſap is the longer digeſted, and the root the ſtronger. The ſame is obſerved of Eſculents, the young Buds or Sprouts of old Roots eat more tender than the firſt cuttings.

Onions large. My Lord *Bacon* ſeem'd to approve of the opinion that *Onions* wax greater, if they be taken out of the Earth, and laid a drying twenty days, and then ſet again. And the more, if the outmoſt Pill be taken off all over, but mentions not at what time of

of its growth this is beſt to be done; however it is a ſufficient encouragement for Gardeners to take up the *Onions*, where they caſually come up too thick, and plant them in thinner places. Several Plants are ſo removed, as *Turnips*, *Lettuce*, &c. and are the fairer, therefore this Obſervation may be of uſe.

To preſerve Plants from Snails and Worms.

Sift Aſhes, or Quick-lime beaten ſmall, about any Plant, and it will preſerve it from Snails or Worms, by reaſon their naked bodies cannot endure the ſharpneſs of the Salt of the Aſhes or Lime. So if you water the ground with the Water wherein Lime or Aſhes have been ſteeped, the Worms will ſoon leave the ground, where the Water gets into their holes, from the ſame cauſe. You may alſo in a Summer Evening (after Rain) with a Candle draw the Worms as they lye on the ground, and put them in a Pail, and diſpoſe of them as you think fit, but you muſt tread ſoft, for the leaſt motion of the ground maketh them retire into the ground. Thus in two or three moiſt Evenings may you clear a whole Border of the greater Worms which are moſt hurtful.

Snails and Worms are all of them of an

Hermaphroditical nature, and are all breeders, and when they couple are eaſily deſtroyed, eſpecially the Snails who couple from the Spring until *Midſummer* and after. And lay their Eggs in the ground, you will find them with their bodies buried in the warm duſt, and only their ſhells above the ground; when you take them out, you muſt rake out their Eggs and deſtroy them, for otherwiſe they will lye there until they have ſtrength to travel, and then, ſome in the ſame Year, others in the Spring following, you will have them diſperſed amongſt your tender Plants and your Wall-Trees, where after a ſhower you may pick them off.

To know good Seeds. If you doubt of the goodneſs of your Seeds, take ſome of them and put them in fair Water, and ſet them in a gentle heat twenty four hours, and if they are good they will ſprout, elſe not. Alſo you may waſh your Seeds in Water, and the dead and light will ſwim, and the good and heavy will ſink, but they muſt be all throughly immerged, elſe you may be deceived.

To defend Plants from Froſt. Secure the Root as well as you can from the Froſt; for if you defend that, the Branch ſeldom ſuffers, but if the Root be

be not ſecured, although the Branch be never ſo well defended, it will periſh. Therefore earth up the Roots as well as you can, and place any ordinary defence about the ſides of the Plant, and no Froſt will hurt it, (unleſs it be your tender Plants that are for the Conſervatory.) Thus may *Gilly-flowers*, *Wall-flowers*, *Stock Gilly-flowers*, *Artichoaks*, &c. be preſerved.

Set tender Plants dry.

Some Plants, if the Roots ſtand dry, the Froſts rarely hurt them; which if moiſt, they are uſually deſtroyed, as *Roſemary*, *Sage*, *Wall-flowers*, &c. Either of theſe will grow on a Wall and endure the ſevereſt colds, but if they ſtand in a moiſt ground, although the Branches be never ſo well defended, they are apt to be deſtroyed with great Froſts. The cauſe is, that Water or moiſture ſtagnating about any Plant, and a Froſt following, is apt to mortifie it, when a Froſt ſhall ſcarce injure a dry Plant. It is the ſame with young and tender Fruits, a Froſty night after a wet day deſtroys more Fruits, than ten dry Froſts can do.

To defend your Plants from Ants.

If you lay Saw-duſt about any Plant, it will defend it from the buſie *Ants*, who cannot eaſily paſs over the Saw-duſt, be-

cauſe it is ſmall and looſe under them, that they cannot have any ſure footing, and ſo by that means are forced to ſteer their courſe another way. Thus may you defend your Wall-Trees from *Ants*, by laying Sawduſt about the Roots of them.

Some anoint the ſtems of their Trees with Tar, to prevent the *Ants* from aſcending them, but then it is beſt to bind Paper about the ſtems and anoint the Paper, for Tar is apt to injure the Bark of your Tree.

Alſo you may bind about the ſtem of the Tree, Wooll about four fingers breadth, which will puzzle the *Ants* to find a way over or through it: be ſure to leave the Wooll rough, that they may not find a way over the threds you bind it withal.

Moſs to deſtroy. Many of your Flower-Trees will in ſome ſorts of Land by long ſtanding become moſſy, which not only defaceth but very much injureth the Tree, and it is a ſign the Tree diſlikes the ground it ſtands in. To prevent the growing of it, and the encreaſing of it whilſt it is yet but newly infected, you muſt remove your Tree into better ground more natural to it, or in caſe you are willing to have it ſtand in the ſame place where now it is, then you

you muſt take it up, and alter the ground, and enrich it as it ought to be, and then you may replant the Tree in the ſame place. And as the Tree thrives and encreaſeth in ſhoots, ſo the moſs will decline, the ſap being waſted and expended more liberally another way.

But if the Moſs hath long continued on the Tree, your beſt way is after Rain that the Moſs be wet and will eaſily come off, to ſcrape it off with a knife of Bone or Wood, for in dry Weather it will not come off ſo well.

Moſs a great annoyance to Trees and ground.

Moſs is a very great annoyance to Trees and to the ground it ſelf, and is a manifeſt ſign of a defect of the more nouriſhing juyce that is in fruitful Plants or Soyl; it is a ſpontaneous excreſcence, as many other Vegetables are, which made the learned Philoſopher *Van Helmont* ſay, that it's Seed diſtilled from the Heavens, which is no more than if he ſhould have ſaid, that it proceeded from the natural inclination of the matter on which it grew, animated by the Cœleſtial Influences, which gave it life, but the matter on which it grew gave it form, it varying according to the diverſity of the matter, from whence it receives its nouriſhment; ſome Moſs being

ing

ing hard, some soft, some white, others green. There is also sweet Moss that grows on *Apple-trees* and *Poplar-trees*, and the Moss of the *Larix-tree* is sweet in the burning. And although all these Mosses are meer excrescenses, yet do they bear seed and encrease, as hath lately been discovered by a learned Virtuoso, who by the help of a Microscope hath observed the Seed-cods or Seed vessels of Moss to contain seeds in them no less wonderful for the greatness of number than the smalness of bulk, which Seed vessels when ripe, he pressing them pretty hard, found that there was a small dust went out of them, which seemed to vanish into the air: pressing and squeezing others of them upon a black plate, and examining the powder with a Microscope, he found it to be a great heap of exceeding small seeds, globular and pretty transparent, ninety thousand whereof extended in length take up no more room than the length of one single Barley-corn or a quarter of an Inch: and twelve millions of the same seeds laid quadrangularly cover no more of a superficies than one square Inch. And 1382400000 weighing only one grain. Eighty of these superficies of seeds make

Hooke's Lampas.

but

but the thickneſs of a piece of fine Paper, ſo that they be laid in a trigonal order, as moſt round bodies uſually place themſelves, that is, the round part of the Seed bearing on the concave diſtance, between the Seeds in the neather laying. For the truth of which Obſervations and Narration, the ſame Author appeals to your own ſenſe and reaſon, in caſe you make uſe of thoſe Artificial Helps he hath for that purpoſe. But his Concluſion is ſomewhat doubtful, that theſe Seeds being thus ſmall, may be carried in the Air from place to place, even to the tops of the higheſt Towers, or places remote, and be there ſown, from whence he ſuppoſeth proceeds the growth of Moſs, and doth not conſider that theſe Seeds being globular and tranſparent (an Argument of their ſolidity and weightineſs) are as uncapable of being drawn up into the Air, and carried far, as the Seeds of *Peaſe*, *Radiſh*, *Purſlain*, *Thyme*, *Marjoram*, &c. For their ſmallneſs is rather an impediment to their Tranſportation than a help, and we find that ſuch Seeds that have a Down or Hair with them, are more uſually carried away with the moving Air, as thoſe of *Thiſtles*, *Lettuce*, *Carrots*, &c. than thoſe that

are

are more ſolid and naked. Nor needeth there any ſuch help as that of ſeed, to beget Moſs, for it may as well naturally proceed from any place prone for it, as Plants of greater bulk, it being not unuſual for *Oak*, *Beech*, *Holly*, *Birch*, and ſuch like, to grow plentifully out of the ground, where other Trees of another kind have been lately felled, from a natural inclination of the Earth, and not from Seeds brought thither by the Air; the Seeds of *Oak*, *Beech*, and *Holly*, being too big for that purpoſe. The ſame may be obſerved in ground inclinable to *Broom*, which being throughly eradicated and taken away, and the ground plowed, ſown and cleanſed for ſeveral Years, yet laid up for ſome time will naturally yield *Broom*: yet thoſe Seeds uncapable of being carried in the Air. Alſo if that be true, that all Plants are procured of Seed, it may be queſtion'd how ſo great a quantity of the *Eryſimum* or *Irio* ſhould be ſown in the Ruines, after the late great Conflagration in *London*, where it was obſerved, that more of it grew there, than was known to be in all *Europe* beſides. This plentiful encreaſe of this Plant, which is not a denizen in *England*, and obſerved not

Evelin's *Philo. Diſcourſe of Earth.*

not to grow plentifully any where but at *Naples*, and that in the time of *Fabius Columna*, could not well be produced of ſeed, unleſs you will imagine that the ſeeds of moſt Plants paſs with the Air over Sea and Land: but the great variety of ſpontaneous productions of the Earth in different years, different ſeaſons, and different ways of tilling the Earth, and its various generations alſo of Inſects and ſmall Animals, (although theſe alſo may be raiſed of ſeed and by propagation) is enough to convince the Intelligent that Moſs may be a natural ſpontaneous production or excreſcence out of Trees, Plants, Soil, or any thing elſe capable to bear it, and that it may be occaſioned by the defect of a liberal expence of the Sap or Juyces another way.

Moles to deſtroy.

Beſides the ordinary ways of killing *Moles* with Traps, you may in the Spring of the year when they are moſt buſie and in their work, caſt them out alive with a Paddle-ſtaff made for that purpoſe, by ſtanding very ſtill whilſt they work, for the leaſt motion of the ground diſturbs them, they having the want of their ſight ſupplied in their hearing and feeling. They do much miſchief in a Garden, and the ſetting

of

of traps or digging them out doth also prejudice your Garden; therefore the best way is, as soon as you perceive that they have made way into your Garden, and that they are retired (as in the latter part of the day they usually do) into the adjacent grounds where they lye more quiet and out of fear, open their common passages and smoke them well with Brimstone, Rosin, Pitch, or such like combustible matter, with *Onions*, *Garlick*, or such like mixed with it, and close up the holes or passages. This will deter them from your Garden as I have tryed, and make them take to some other place, or you may take a dead *Mole* and lay in the haunt, and that will operate the same effect.

Caterpillars to destroy them.

To prevent the encreases of *Caterpillars* where you find any of their *Puckets* which adhere to the twigs of Trees, in which they lay their eggs all the Winter, (as Silk-worms do in their bags) take them off and burn them, for the approaching Sun in the Spring gives life to those pernicious Animals who multiply exceedingly.

But if the year be dry and prone to the generation of Insects, these vermine are apt to be bred in abundance on *Cabbages*, *Cauliflowers*, *&c.* which to prevent, there

is

is nothing so effectual as watring, for in dripping years they are not so apt to breed as in dry.

To destroy *Caterpillars* on Trees, it is said that if you make a Ring of Tar towards the bottom of your Tree, then hang a bag full of *Pismires* on the Tree that they may easily get out, and when they cannot get down by reason of the Tar, rather than they will starve for hunger, they will eat up all the *Caterpillars*: which if true, it is like the falling upon *Scylla* to avoid *Charybdis*. *An ingenious way to destroy them.*

Several sorts of Flowers are apt to turn white by long standing, or removing into bad ground, as red and purple *Primroses*, *Blew Violets*, *Sweet Williams*, *Gilliflowers*, &c. which proceedeth from scarcity of nourishment, there requiring good nourishment to maintain the dark colours; as in Tulips, the best and lightest colours are preserved by the more barren Earth, when a rich Soil turneth them to a plain dark colour. But always observe, that change of soil preserves variety of colours, so that it be to the degrees of fatter or leaner, as you would have your Flowers incline to darker or lighter colours. *Running of Colours.*

It is observed that there is more of white

than

Of the variety of colours in Flowers.

than of any other colour in Flowers, and leaſt of green, that being the general colour, although in different ſhades, of all leaves of Plants, except ſome few Rarities that are red or white leaved, as *red Sage*, *white Marjoram*, *Amaranthus*, and ſome variegated Plants. In Flowers from white there are all ſorts of ſhades, to the yellow, ſcarlet, and deepeſt red, and to the sky-colour and deepeſt blew, with variety of mixtures: it is very rare to ſee a Plant green, yet there are ſuch, as the *Roſe Plantain*, being only a Tuft of green leaves, and the *green Primroſe* hath perfectly green leaves in form of a Flower, but mix'd with purple or white leaves. The common *Parrot Tulip* hath a mixture of Green in the Flower, but it ſeems to be an imperfection in it, yet it conſtantly bloſſoms alike. Black is not unuſually found in the bottoms of *Tulips* and *Anemones*, but no Flower is known to have a black leaf, ſave only the *Bull Iris*.

Of Sympathy and Antipathy of Plants.

There is a ſympathy and antipathy in Plants. And many fabulous traditions there are concerning them: but this is certainly obſerved, that ſome Trees will not thrive under the ſhade or drip of another, as the drip of a Walnut-Tree and of a Cherry-Tree

Tree are injurious to other Trees, becauſe the leaf is bitter, and the drip deſtroyeth ſuch Trees or Plants that are under it. The like doth the drip of the leaves of the *Artichoak*, and of *Hemp*, which deſtroyeth all other Vegetables near it, thoſe grounds being free from weeds where they grow, from that cauſe. Some Plants will not thrive near others, becauſe they draw alike nouriſhment, and ſo rob or deprive one another, as Strawberries and Flowers with fibrous Roots, will not thrive together; but Plants that draw contrary nouriſhment, will proſper very well near together, as *Rue* and *Lettuce* together, *Onions* and *Savory*, or *Lettuce*, or *Purſlain*, will grow very near and kindly together.

Perception in Plants.

There are very ſtrange Natures in ſeveral Plants, that are not by every one obſerved, which is a kind of perception in them, tending themſelves to that which nouriſheth and preſerves them, and eſchewing and avoiding that which injureth them. As a *Cucumber* is obſerved to grow towards Water, more than otherwiſe it would do in caſe no Water were placed near it: we may conſtantly obſerve the natural inclination of the *Hop*, the

French Bean or *Kidney Bean*, and the *Periploca*, to a *Pole* or *Stick*, and how they twiſt about them, and how ill they thrive without ſuch Helps. It is certain that they have ſome perception of ſuch Pole, for you ſhall eaſily perceive their tender Buds to bend towards it, and at the leaſt touch of it to twiſt about it. After the ſame manner doth the *Indian Jaſſemine* or *Mexican Creeper*, and the *Ivy*, tend towards a Wall or Tree, and adhere to it, with love and delight. Several Fruit-Trees alſo will flouriſh better againſt a Wall than ſingle, not becauſe of the warmth or ſupport only, but their affection to a Wall; as the *Curran*-Tree will grow much fairer and bear better Fruit againſt a Wall than any other way ſupported, although on the North-ſide of a Wall; the like is obſerved of ſome other Fruits, as *Plumbs*, *Filberds*, &c. The Roots of ſome Trees will run far towards any rich, fat, or moiſt place, it exciting ſuch Roots which have a natural perception, which way the beſt nouriſhment is to be obtained. Several Plants will alſo avoid that which they delight not in, as moſt Trees yield or recede from others that ſhade them, and many Plants planted near a Wall or other Fence, decline it, and lean

lean towards the more open Air, be it towards what Coaſt it will. The turning of a Flower towards the Sun, or opening when the Sun appears, may be cauſed from the warmth it receives from it, and the bloſſoming of the greater *Convolvulus* in the Evening, may be cauſed from cool moiſt Air at that time, the Flower being ſo tender, that it withereth at the next approach of the Sun. But the inclination of a Plant to, and averſion from any thing, muſt be cauſed from a perception in that Plant, of that in which it delights, or which it abhors.

THE GARDENERS Monthly DIRECTIONS.

JANUARY.

The Garden and Orchard.

PLant Vines, and other Fruit-trees, if the weather be open and mild; dig and trench Gardens, or other ground for Peaſe, Beans, *&c.* againſt the Spring: dig Borders, uncover roots of Trees where need is, and add ſuch Manure to them as they require: you may alſo, if the weather prove mild, ſet Beans and Peaſe. As yet Roſes may be cut and removed.

Prune Orchard-fruits and Vines, ſo that it be not froſty; nail and trim Wall-fruits; cleanſe Trees of Moſs in moiſt weather.

Gather Cions for Graffs, and ſtick them in the ground; for they will take the better

ter, being kept ſome time from the Tree; and at the latter end, if the weather be mild, you may begin to Graff.

Make your Hot-bed, and ſow therein your choice Sallads; ſow Colleflowers; ſecure your choice Plants and Flowers from the injury of the weather, by Covers, by Straw, or Dung: Earth up the roots of ſuch Plants the Froſts have uncovered.

Set Traps to deſtroy Vermine, where you have or ſow ſuch Plants or Seeds as they injure.

Take Fowl, deſtroy Sparrows in Barns, and near them; kill the Opes or Bullfinches that feed on the buds of Fruit-trees.

Dig a Weedy Hop-garden. *Hop-garden*

Turn up your Bee-hives, and ſprinkle them with warm and ſweet Wort dexterouſly. Alſo you may remove Bees. *Apiary.*

Things of Beauty in Seaſon for the Garden of Pleaſure.

Holly, Ivy, Bayes, Juniper, Cypreſs-trees, Eughs, Pine Apple-trees, Fir-trees, Roſemary, Lavender, Perriwinckle the white, the purple, and the blew, Germander, Flags, Orange-trees, Lemon-trees, and Myrtle, if they be ſtoved, ſweet Marjoram, warm Sets.

FEBRUARY.

Garden and Orchard. YOu may yet prune and trim Fruit-trees, and cleanse them from Moss and Cankers. Now is a very good time for grafting the more forward sort of Fruit-trees, if the weather be temperate.

Your tender Wall-fruit cut not till you think the hard Frosts are over.

Plant Vines, or any sorts of Fruit-trees in open weather: trim up your Pallisade-hedges and Espaliers: set Kernels, Nuts, or stones of Fruit, and other hard seeds.

Lay branches to take root, or place Baskets, *&c.* of Earth for the branches to pass through.

Sow Annise, Beans, Pease, Raddish, Parsnips, Carrots, Onions, Parsley, Spinage, and other hardy Herbs or Seeds, and plant Cabbage-plants: plant out Colleflowers into warm places: Also plant Liquorice. Yet you may destroy Sparrows. Now is the time the Bull-finch doth the greatest harm to the buds of Fruit-trees.

Make up your Hot-beds for Melons, Cucumbers, *&c.* Sow Asparagus. Continue Vermine-traps, and pick up all the Snails

Snails you can find, and deſtroy Frogs and their Spawn.

A good time to ſew Fiſh-ponds, and take Fiſh; the moſt Fiſh being now in ſeaſon.

Now you may, if the weather prove mild, plant Hops, and dreſs them that are out of heart. *Hop-garden*

Half open your paſſages for Bees; and now may ye remove them. *Apiary.*

Things of Beauty in Seaſon for the Garden of Pleaſure.

The Mezerion-tree, which now bloſſoms, Crocus Vernus, both the yellow and the grey, Primroſes, Anemones, the early Tulippa, Hyacinthus Orientalis Chamairis, Frettellaria.

MARCH.

Garden and Orchard. THis is the principal Month in the year for grafting all ſorts of Fruit-trees. Now cover the roots of all ſuch Trees you laid bare in the Winter preceding, and remove ſuch young Trees you omitted to remove in the better Seaſon.

Carry Dung into your Gardens, Orchards, *&c.*

Turn your Fruit in the Room where it lies, but open not yet the Windows.

You may now tranſplant moſt ſorts of Garden-herbs, Sweet-herbs, and Summer-flowers; make Hot-beds for Cucumbers, Melons, *&c.* Saffron alſo may now be planted, and Madder.

Now ſow Endive, Succory, Leeks, Raddiſh, Beets, Parſnips, Skirrets, Parſley, Sorrel, Bugloſs, Borrage, Chervil, Sellery, Smallage, Alliſanders, *&c.* Alſo Lettice, Onions, Garlick, Orach, Purſlain, Turneps, Peaſe, Carrots, Cabbage, Creſſes, Fennel, Marjerom, Baſil, Tobacco, Leeks, Spinage, Marigolds, *&c.*

Dreſs up and ſtring your Strawberry-beds; uncover Aſparagus-beds, and tranſplant

plant Asparagus; slip and plant Artichoaks and Liquorice.

Stake and bind up the weakest Plants against the winds: sow Pinks, Carnations, *&c.* In this Month sow Pine kernels, and the Seeds of all Winter-greens.

Plant all Garden-herbs and Flowers that have fibrous Roots.

Sow choice Flowers that are not natural for our Clime in Hot-beds this Month.

You may now plant Hops; it is a very seasonable time to dress them. *Hop-garden*

Now the Bees sit, keep them close night and morning, if the weather prove ill. You may yet remove Bees. *Apiary.*

Things of Beauty in Season for the Garden of Pleasure.

Violets, especially the single blew, which are the earliest; the yellow Daffadil, the Daisie, the Almond-tree in blossom, the Peach-tree in blossom, the Cornelian-tree in blossom, sweet Bryer.

APRIL.

APRIL.

HAil April, *true* Medea *of the Year,*
That makeſt all things young and freſh Appear:
When we deſpair, thy ſeaſonable Showers
Comfort the Corn, and chear the drooping Flowers.

Garden and Orchard. You may yet Graff ſome ſorts of Fruit in the Stock the beginning of this Month.

Now ſow all ſorts of Garden-ſeeds in dry weather, and plant all ſorts of Garden-herbs in wet weather.

Plant French-beans, Cucumbers, Melons, Artichoaks and Madder, and ſow ſuch tender Seeds that could not abide the harder Froſts: ſet French-beans.

Gather up Worms and Snails after evening Showers, or early in the morning.

Sow your Annual Flowers that come of Seed, that you may have Flowers all the Summer; and tranſplant ſuch Flowers with fibrous Roots you left unremoved in *March*: ſow alſo the Seeds of Winter-greens.

Now bring forth your tender Plants you pre-

preſerved in your *Conſervatory*, except the Orange-tree, which may remain till *May*.

Tranſplant and remove your tender Shrubs; as Jaſimines, Myrtles, Oleanders, *&c.* Towards the end of this Month alſo in mild weather, clip Phillyrea, and other tonſile Shrubs, and tranſplant any ſort of Winter-greens.

Plant Hops, and pole them in the be- *Hop-garden.*
ginning of *April*, and bind them to the Poles.

Open the doors of the Bee-hives, for *Apiary.*
now they hatch, that they may reap the benefit of the Flowry Spring; and be careful of them.

Things of Beauty in Seaſon for the Garden of Pleaſure.

In this Month comes the double white Violet, the Wall-flower, the Stock Gilly-flower, the Cowſlip, the Flower de Luce, and Lillies of all Natures, Roſemary-flower, the Tulippa, the double Piony, the pale Daffadil, the *French* Honyſuckle, the Cherry-tree in bloſſom, the Damaſcen and Plum-trees in bloſſom, the white Thorn in leaf, the Lelack-tree.

MAY.

MAY.

Garden and Orchard. PLant all ſorts of Winter-greens.

Sow the more tender Garden Seeds; as ſweet-Marjerom, Baſil, Thyme, and hot Aromatick Herbs and Plants: ſet Sage and Roſemary.

Cover no longer your Cucumbers, Melons, *&c.* excepting with Glaſſes: ſow Purſlain, Lettice, *&c.*

At the end of this Month, take up ſuch Tulips which are dried in the ſtalk.

Hop-garden Bind Hops to their Poles, and make up the Hills after Rain.

Apiary. Watch the Bees now ready to ſwarm.

Things of Beauty in Seaſon for the Garden of Pleaſure.

In *May* come Pinks of all ſorts, eſpecially the bluſh Pink, Roſes of all ſorts, except the Muſk, which comes later, Honyſuckles, Strawberries, Bugloſs, Columbines, the French Marigold, Flos Africanus, Cherry-tree in Fruit, Ribes, Figs in Fruit, Raſps, Vine-flowers, Lavender in Flowers, the ſweet Satyrian with the white Flower, Herba Muſcaria, Lillium Convallium, the Apple-tree in Bloſſom.

JUNE.

NOw begin to Inoculate: beware of cutting Trees, other than the young ſhoots of this year: pluck off Buds where you are not willing they ſhould branch forth. *Garden and Orchard.*

Water the latter Planted Trees, and lay moiſt Weeds, *&c.* at the roots of them.

It is a ſeaſonable time to diſtil Aromatick and Medicinal Herbs, Flowers, *&c.* and to dry them in the ſhade for the Winter: Alſo to make Syrrups, *&c.*

Gather Snails, Worms, *&c.* and deſtroy Ants and other Vermine.

Set Saffron, plant Roſemary and Gilly-flowers; ſow Lettice, and other Sallets, for latter Salleting.

Gather Seeds that are ripe, and preſerve them that are cool and dry: water the dry Beds; take up your bulbous roots of Tulips, Anemonies, *&c.*

Inoculate Jaſumines, Roſes, *&c.* Alſo tranſplant any ſort of bulbous roots that keep not well out of the ground. Now plant ſlips of Myrtle, ſow latter Peaſe.

Dig Ground where you intend a Hop-gar- *Hop-gard*

garden, and bind ſuch Hops to the Poles the wind hath ſhaken off.

Apiary. Bees now ſwarm plentifully; therefore be very vigilant over them, they will requite your care.

Things of Beauty in Seaſon for the Garden of Pleaſure.

In this Month comes Pinks of all ſorts, Roſes of all ſorts, Honyſuckles, Strawberries, Bugloſs, Columbines, the French Marigold, Flos Africanus, Cherry-tree in Fruit, Ribes, Figs in Fruit, Raſps, Vine-flowers, Lavender in Flowers, the ſweet Satyrian with the white Flower, Herba Muſcaria, Lilium Convallium, the Apple-tree in Bloſſom.

JULY.

IT is a principal time for the Inoculation of choice Fruits, Roſes, &c. *Garden and Orchard.*

And for the Summer-pruning of your Wall-Trees for the making of Cherry-Wine, Rasberry-Wine, &c.

Cut off the ſtocks of ſuch Flowers that have done Bloſſoming, and cover their roots with new fat Earth.

Sow Sallet-herbs for latter Salleting; and alſo Peaſe.

Take away the Snails from your *Mural Trees.*

Slip Stocks, and other lignous Plants and Flowers, and lay Gilliflowers and Carnations for encreaſe, watering them, and ſhadowing them from the fervent Sunbeams. Lay alſo Myrtles, and other curious Greens: clip Box, and other Tonſile Plants.

Graff my approach, and inoculate Jaſmines, Oranges, &c.

Tranſplant or remove Tulips, or other bulbous roots: ſome may be kept out of the Ground, others immediately planted.

If the Seaſon be very dry, the watering *Hop-garden*

of

of the Hops will very much advantage them, and make them the more fruitful: if it prove moiſt, renew and cover the Hills ſtill with freſh Mould.

Apiary. Now Bees caſt their latter ſwarms, which are of little advantage; therefore it's beſt to prevent them.

Streighten the entrance of your Bees: Kill the Drones, Waſps, Flies, *&c.*

Things of Beauty in Seaſon for the Garden of Pleaſure.

The Roſe Bay and the Indian in Flower, Gilliflowers in all Varieties, Carnations, Musk Roſes, and the Lime-tree in Bloſſom, early Pears and Plums in Fruit, Ginnitings, Quadlings, *&c.*

A U.

AUGUST.

THis is a very good time for Inoculation in the former part of this Month. *Garden and Orchard.*

You may now make Cider of Summer-fruits; prune away ſuperfluous Branches from your Wall-fruit-Trees, but leave not the Fruit bare, except the red Nectorine, which is much meliorated and beautified by lying open to the Sun.

Pull up Suckers from the Roots of Trees; unbind the Buds you Inoculated a Month before, if taken.

Plant Saffron, ſet ſlips of Gilliflowers, ſow Anniſe. Now is beginning a ſecond ſeaſon for the encreaſing and tranſplanting moſt Flowers, and other Garden-Plants; as Herbs, Strawberries, *&c.*

The Seeds of Flowers and Herbs are now to be gathered: Alſo gather Onions, Garlick, *&c.*

Sow Cabbages, Colleflowers, Turneps, and other Plants, Roots and Herbs for the Winter, and againſt the Spring.

Now ſow Larks-heels, Canditufts, Columbines, *&c.* and ſuch Plants as will endure the Winter.

You may yet ſlip Gilliflowers, and tranſplant bulbous Roots about *Bartholomew*-tide: ſome eſteem it the only ſecure ſeaſon for removing your Perennial or Winter-greens; as Phyllirea's, Myrtles, *&c.* It is alſo the beſt time to plant Strawberries, and it is not amiſs to dreſs Roſe-trees, and plant them about this time.

Hop-garden. Prop up thoſe Poles the Wind blows down: Alſo near the end of the Month gather Hops.

Apiary. Towards the end of this Month take Bees, unleſs the goodneſs of the weather provoke you to ſtay till the middle of the next: deſtroy Waſps and other Inſects, and ſtreighten the paſſages to ſecure them from Robbers.

Things of Beauty in Seaſon for the Garden of Pleaſure.

The Myrtles bloſſom this Month, and continue flowering until the middle of *December*, Plums of all ſorts in Fruit, Pears, Apricocks, Barbaries, Filbeards, Muſk-melons, Monks-hoods, of all Colours.

SEP-

SEPTEMBER.

YOu may now make Cider and Perry of ſuch Fruits as are not laſting, and gather moſt ſorts of Winter-pears, and ſome ſorts of Winter-apples; but gather not long-laſting Fruit till after *Michaelmas*. *Garden and Orchard.*

Sow Cabbages, Colleſlowers, Turnips, Onions, *&c.* Now tranſplant Artichoaks, and Aſparagus-roots, and Strawberries, out of the Woods: plant forth your Cabbages and Colleſlowers that were ſown in *Auguſt*, and make thin the Turnips where they grow too thick.

Now plant your Tulips, and other bulbous Roots you formerly took up, or you may now remove them: you may alſo tranſplant all fibrous Roots.

Now retire your choice Plants into the Conſervatory, and ſhelter ſuch Plants that are tender, and ſtand abroad.

Towards the end of this Month may you gather Saffron.

Now finiſh the gathering and drying of your Hops; cleanſe the Poles of the Hawm, and lay up the Poles for the next Spring. *Hop-garden.*

Apiary. Take Bees in time; ſtreighten the entrance into the Hives; deſtroy Waſps, *&c.* Alſo you may now remove Bees.

Things of Beauty in Seaſon for the Garden of Pleaſure.

In this Month comes Grapes, Apples, Poppies of all colours, Peaches of all ſorts, Melo-Cotones, Nectarines, Cornelians, Wardens, Quinces.

OCTOBER.

MAke Cider and Perry of Winter-fruits throughout this Month. *Garden and Orchard.*

Now is a very good time for the planting and removing of all ſorts of Fruit-trees, or any other Trees that ſhed their Leaf.

Trench the ſtiffer grounds for Orcharding and Gardening, to lie for a Winter mellowing. Now lay open the roots of old and unthriving Trees, or ſuch that ſpend themſelves too much, or too ſoon in bloſſoms.

Gather the reſidue of the Winter-fruits; alſo gather Saffron.

Sow all ſorts of Fruit-ſtones, Nuts, Kernels and Seeds, either for Trees, or Stocks.

Cut and prune Roſe-trees. Many of *September*-works may yet be done, if the Winter be not too forward.

Now plant your bulbous roots of all ſorts, and continue planting and removing ſeveral Herbs and Flowers with fibrous roots, if the former and better ſeaſon be omitted.

This Month is the beſt time to plant Hops: And you may bag or pack thoſe you dryed the laſt Month. *Hop-garden.* Now

Apiary. Now you may safely remove Bees.

Things of Beauty in Season for the Garden of Pleasure.

In this Month come Medlars, Bullis's, Roses cut or removed to come late, Hollyokes, and such like.

NOVEM-

NOVEMBER.

PEaſe and Beans may now be ſet; ſome ſay Garlick: And trench or dig Gardens. *Garden and Orchard.*

Remove and plant Fruit-trees; furniſh your Nurſery with Stocks againſt the Spring.

Yet may you make Cider of hard Fruits that are not pulpy.

Prune Trees; mingle your rich Compoſt with the Earth in your Orchards againſt the Spring.

Some very hard Fruits may yet be gathered.

Lay up Carrots, Parſnips, Cabbages, Colleflowers, *&c.* either for your uſe, or to tranſplant for Seed at the Spring: cover the Aſparagus beds, Artichoaks, Strawberries, and other tender Plants, with long-Dung, Horſe-litter, Straw, or ſuch like, to preſerve them from the bitter Froſts; ſo dig up Liquorice.

Now is the beſt ſeaſon to plant the faireſt Tulips, if the weather prove not very bitter.

Cover with Mattreſſes, Boxes, Straw, *&c.* the tender Seedlings.

Plant Roſes, Lilac, and ſeveral other Plants and Flowers, the weather being open.

As yet you may ſow Nuts, Stones, *&c.*

Hop-garden Now carry dung into your Hop-garden, and mix it with ſtore of Earth, that it may rot againſt the Spring.

Apiary. You may this Month ſtop up your Bees cloſe, ſo that you leave breathing vents; or you may houſe them till *March.*

Things of Beauty in Seaſon for the Garden of Pleaſure.

Holly, Ivy, Bayes, Juniper, Cypreſs-trees, Eughs, Pine Apple-trees, Fir-trees, Roſemary, Lavender, Perriwinckle the white, the purple, and the blew, Germander, Flags, Orange-trees, Lemon-trees, Myrtle, and ſweet Marjoram, warm Sets.

DECEMBER.

YOu may now ſet ſuch Fruit-trees as are not very tender, and ſubject to the injury of the Froſt. *Garden and Orchard.*

Alſo tranſplant any ſort of Fruit-trees in open weather: Plant Vines, and other Slips and Sions, and Stocks for grafting.

Prune Vines if the weather be open.

Cover the Beds of Aſparagus, Artichoaks and Strawberries, *&c.* with warm Horſe-litter, Straw, *&c.* if not covered before.

Sow Beans and Peaſe if the Winter be moderate: trench ground, and dreſs it againſt the Spring.

Set Traps for Vermine, and pick out Snails out of the holes of walls, *&c.*

Sow or ſet Bay-berries, Laurel-berries, *&c.* dropping ripe.

This Month may you dig up Liquorice.

Dig a weedy Hop-garden, and carry Dung into it, and mix it with Earth. *Hop-garden*

Feed weak Stocks. *Apiary.*

Things

Things of Beauty in Season for the Garden of Pleasure.

Holly, Ivy, Bayes, Juniper, Cypress-trees, Eughs, Pine Apple-trees, Fir-trees, Rosemary, Lavender, Perriwinckle, the white, the purple, and the blew, Germander, Flags, Orange-trees, Lemmon-trees, Myrtle, and sweet Marjoram, warm Sets.

ERRATA.

PAge 73. l. 3. for *Maternus* r. *Alaternus*. p. 151. d. *Snails, Caterpillars.*

AN

AN
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